

**To:** Daniel J. Malone[Daniel.Malone@cmsenergy.com]; Dennis D. Dobbs[DENNIS.DOBBS@cmsenergy.com]  
**Cc:** Lacey, Pam[PLacey@aga.org]; Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Fri 3/18/2016 2:35:20 PM  
**Subject:** RE: Consumers Energy plans to join EPA Voluntary Methane Challenge

Absolutely!

We are very excited to hear of Consumers Energy's plans to join the program. Our updated Partnership Agreement is located [here](#) and on the Methane Challenge [website](#) (where the program's framework document, supplementary technical information document, and other key sources of information are located). We recently sent out a detailed email to all companies interested in joining the program, so I will provide the text of that email below. Please let me know if you have any further questions that are not answered here.

On behalf of the U.S. Environmental Protection Agency (EPA), I am pleased to hear of your interest in joining the Natural Gas STAR Methane Challenge Program as a founding partner. We will be officially launching this new program at the Global Methane Forum (GMF) at 10:00am on March 30, 2016 in Washington, D.C.

The launch event will be hosted by Janet McCabe, EPA's Acting Assistant Administrator for Air and Radiation. If you confirm your participation as a founding partner, we encourage you to attend this exciting event. We will recognize your company even if you are not able to participate in person. Please be aware of the following next steps:

- ☐ By March 23, please contact us (see contact information below) to confirm that you will be joining as a founding partner, and provide your signed Partnership Agreement.
- Provide us a short bio (approximately 75 words) describing your company, your commitments, and highlighting reasons for becoming a Methane Challenge partner.
- If your company plans to attend the Launch Event, provide the name, title, and contact information of the person who will be representing your company at the event and, if different, the contact information for the individual coordinating your company's participation at the event.
- ☐ Also, by March 23, please provide a link to your company's website as well as the

specific way your company should be listed on the Methane Challenge Program website.

- ☐ ☐ ☐ ☐ ☐ ☐ Be sure to register for the GMF as soon as possible (<http://globalmethane.org/forum/>).

Please send the above information to myself and Elina Bouloubasis ([elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)). Once we receive confirmation of your participation, we will provide more specific details about the launch event agenda, which will include recognition of each partner and individual and group photos. Please note that due to time constraints, we do not anticipate that partner companies will be able to give individual remarks at the event.

As a new Methane Challenge Program partner, there are a few next steps to be aware of. Within six months after joining the Program, each partner must develop an Implementation Plan to provide details on their planned participation, such as anticipated rate of progress, key milestones, and other relevant context. See the following Guidelines document for more information about how to develop an Implementation Plan:  
[http://www3.epa.gov/gasstar/documents/MC\\_IP\\_Guidelines\\_Final.pdf](http://www3.epa.gov/gasstar/documents/MC_IP_Guidelines_Final.pdf).

We will also be working with partners as we develop the Program's reporting system, and will be seeking input and feedback in the coming months. Finally, in an effort to further highlight our partners' accomplishments, we aim to work with partners to develop "Fact Sheets" that cover notable historical actions taken in advance of the Methane Challenge Program in efforts to mitigate methane emissions.

We encourage you to attend the full GMF event that will offer high-level plenary sessions on cross-cutting issues such as project financing, joint Global Methane Initiative (GMI)-Climate & Clean Air Coalition (CCAC) discussions on projects and policy, and ample opportunities for networking with methane experts in the public and private sectors from around the world. A draft agenda is available at <http://globalmethane.org/forum/>. We hope you are able to attend and participate in the sessions.

Please feel free to contact me with any questions you may have about the Methane Challenge Partnership. Please contact Elina Bouloubasis (703-373-0149 or [elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)) with any questions about the launch event. Thank you again for your support of the Methane Challenge Program and we hope to see you at the launch event in Washington, D.C.



Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Lacey, Pam [mailto:PLacey@aga.org]

**Sent:** Thursday, March 17, 2016 5:32 PM

**To:** Pryor, Justin <Pryor.Justin@epa.gov>

**Cc:** Daniel J. Malone <Daniel.Malone@cmsenergy.com>; Dennis D. Dobbs  
<DENNIS.DOBBS@cmsenergy.com>

**Subject:** FW: Consumers Energy plans to join EPA Voluntary Methane Challenge

Justin – Would you please send Dan Malone and Dennis Dobbs at Consumers Energy the updated form of Partnership Agreement and the logistics for the March 30<sup>th</sup> event? As noted below, Consumers Energy plans to join as a Founding Member. Thank you! - Pam

**Pamela A. Lacey | Chief Regulatory Counsel**

**Office of General Counsel**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7340 | M: 202-809-6565 | F: 202-824-9190 | [placey@aga.org](mailto:placey@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable

delivery of clean natural gas to over 69 million customers throughout the nation.

**From:** Daniel J. Malone [<mailto:Daniel.Malone@cmsenergy.com>]  
**Sent:** Thursday, March 17, 2016 5:14 PM  
**To:** Lacey, Pam <[PLacey@aga.org](mailto:PLacey@aga.org)>; Sames, Christina <[csames@aga.org](mailto:csames@aga.org)>  
**Cc:** John G. Russell <[JOHN.RUSSELL@cmsenergy.com](mailto:JOHN.RUSSELL@cmsenergy.com)>; Patricia K. Poppe <[patti.poppe@cmsenergy.com](mailto:patti.poppe@cmsenergy.com)>; Dennis D. Dobbs <[DENNIS.DOBBS@cmsenergy.com](mailto:DENNIS.DOBBS@cmsenergy.com)>; Garrick J. Rochow <[GARRICK.ROCHOW@cmsenergy.com](mailto:GARRICK.ROCHOW@cmsenergy.com)>; Mary P. Palkovich <[Mary.Palkovich@cmsenergy.com](mailto:Mary.Palkovich@cmsenergy.com)>; Linda M. Hilbert <[LINDA.HILBERT@cmsenergy.com](mailto:LINDA.HILBERT@cmsenergy.com)>  
**Subject:** EPA Voluntary Methane Challenge

Pam,

Consumers Energy will join the EPA Methane Challenge as a Founding Member. Please send information needed to formalize the pledge, and to the logistics of the event on March 30<sup>th</sup> to Dennis Dobbs and myself.

Thanks

Dan

**To:** Ihle, Jack[Jack.Ihle@xcelenergy.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Thur 3/17/2016 6:16:12 PM  
**Subject:** RE: Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

Hi Jack,

Excellent news!

Beyond tracking the GMF Agenda (which includes specifics on Methane Challenge launch event) for updates and information regarding other sessions you may be interested in and able to attend, we sent out emails yesterday to each company that indicated interest in the program. In case you didn't receive the email or it found its way into your spam folder, I will provide the text of that email below (which indicates a few next steps as a founding partner), but please let me know if you have any additional questions (202-343-9258).

On behalf of the U.S. Environmental Protection Agency (EPA), I am pleased to hear of your interest in joining the Natural Gas STAR Methane Challenge Program as a founding partner. We will be officially launching this new program at the Global Methane Forum (GMF) at 10:00am on March 30, 2016 in Washington, D.C.

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Please feel free to contact me or Justin Pryor (202-343-9258 or [pryor.justin@epa.gov](mailto:pryor.justin@epa.gov)) with any questions you may have about the Methane Challenge Partnership. Please contact Elina

Bouloubasis (703-373-0149 or [elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)) with any questions about the launch event. Thank you again for your support of the Methane Challenge Program and we hope to see you at the launch event in Washington, D.C.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Ihle, Jack [mailto:Jack.Ihle@xcelenergy.com]

**Sent:** Thursday, March 17, 2016 12:12 PM

**To:** Pryor, Justin <Pryor.Justin@epa.gov>

**Subject:** RE: Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

I am registered, Justin, thank you.

Is there anything I need to know about concerning the launch portion of the day's event? I will be arriving late on March 29.

Best,

-Jack Ihle

**From:** Pryor, Justin [mailto:Pryor.Justin@epa.gov]

**Sent:** Wednesday, March 16, 2016 5:49 AM

**To:** Ihle, Jack

**Subject:** RE: Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

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Hi Jack,

We would be extremely happy to have you or anyone else at any level of the company to represent Xcel Energy at our launch event. I recommend registering as soon as you can for the Global Methane Forum (launch event will be on March 30), at <http://www.globalmethane.org/forum/registration.html>. I hear hotels are filling up quickly.

Again, thank you for your interest and we look forward to your partnership in the Methane Challenge Program.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Ihle, Jack [<mailto:Jack.Ihle@xcelenergy.com>]  
**Sent:** Tuesday, March 15, 2016 4:01 PM  
**To:** Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>  
**Subject:** RE: Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

Hi Justin,

We're deciding who from Xcel Energy should attend the methane launch event. Our Policy VP, and our gas SVP, are not available. I could be available to go but just wanted to check to see if a humble Director (me) would be well-received at the launch event. I would mention that I do regularly work with fairly high-level EPA staff such as Joe Goffman, and have met Janet McCabe before as well.

Your honest input would be much appreciated to help us decide and get our plans made.

Best,

Jack Ihle

**Xcel Energy | Responsible By Nature**

Director, Environmental Policy & Emerging Technology

1800 Larimer Street, 13<sup>th</sup> Floor Denver, CO 80202

P: 303.294.2262 F: 303.308.7691

E: [jack.ihle@xcelenergy.com](mailto:jack.ihle@xcelenergy.com)

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XCELENERGY.COM

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]  
**Sent:** Monday, March 14, 2016 6:53 AM  
**To:** Ihle, Jack  
**Cc:** Campbell, Cheryl F; Zich, Joni H; West, Jeffrey L; Bylin, Carey  
**Subject:** RE: Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

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**XCEL ENERGY SECURITY NOTICE:** This email originated from an external sender. Exercise caution before clicking on any links or attachments and consider whether you know the sender. For more information please visit the Phishing page on XpressNET.

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Hi Jack,

This is great news! Thank you for letting us know. We will be following up with additional details specific to your company's participation in the launch event, pending your final confirmation. Please note that we have recently revised our Partnership Agreement on the web to allow for modification of the source commitment table if needed:  
[https://www3.epa.gov/gasstar/documents/MC\\_Partnership\\_Agreement\\_Final.pdf](https://www3.epa.gov/gasstar/documents/MC_Partnership_Agreement_Final.pdf). Currently the Partnership Agreement only includes a mailing address, but you can send a scanned copy of the Partnership Agreement to me via e-mail if that is preferable.

We look forward to working with you on the Methane Challenge Program.

Respectfully,



Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Ihle, Jack [<mailto:Jack.Ihle@xcelenergy.com>]

**Sent:** Friday, March 11, 2016 7:14 PM

**To:** Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>

**Cc:** Campbell, Cheryl F <[cheryl.f.campbell@xcelenergy.com](mailto:cheryl.f.campbell@xcelenergy.com)>; Zich, Joni H <[joni.h.zich@xcelenergy.com](mailto:joni.h.zich@xcelenergy.com)>; West, Jeffrey L <[jeffrey.l.west@xcelenergy.com](mailto:jeffrey.l.west@xcelenergy.com)>

**Subject:** Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

Dear Mr. Pryor,

Xcel Energy is considering joining Methane Challenge as a Founding Partner. We plan to follow the steps outlined in the 1-page document "How to Join EPA's Voluntary Methane Challenge as a Founding Partner." We are likely to send a representative to attend the launch event on March 30, but are still deciding who will represent the Company.

Please let us know if there is more information to consider at this point, and thank you for the opportunity to participate.

Best,

Jack Ihle

**Xcel Energy | Responsible By Nature**

Director, Environmental Policy & Emerging Technology

1800 Larimer Street, 13<sup>th</sup> Floor Denver, CO 80202

P: 303.294.2262 F: 303.308.7691

E: [jack.ihle@xcelenergy.com](mailto:jack.ihle@xcelenergy.com)

---

[XCELENERGY.COM](http://XCELENERGY.COM)

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**Cc:** tracy.gionfriddo@eversource.com[tracy.gionfriddo@eversource.com]  
**From:** tracy.gionfriddo@eversource.com  
**Sent:** Tue 3/15/2016 6:07:35 PM  
**Subject:** Eversource  
0779\_001.pdf

Good afternoon Carey,

Attached, please find the signed agreement for the Methane Challenge. The original will follow in the post. William Akley and Ellen Angley will be attending the Founding Partners event at the Global Methane Forum on behalf of Eversource. Please let me know if you have any questions or need additional information.

Also, Ruthanne Calabrese, Manager of Environmental Compliance and Performance will be the contact for our companies going forward. She can be reached at 860-665-6181.

Thank you again for all your help getting this set up.

Tracy A. Gionfriddo  
Senior Environmental Specialist

PLEASE NOTE my new email:  
tracy.gionfriddo@eversource.com

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## Natural Gas STAR Methane Challenge Program: Partnership Agreement for Best Management Practice (BMP) Commitment

The Natural Gas STAR Methane Challenge Program is a flexible, voluntary partnership between the U.S. Environmental Protection Agency (EPA) and oil and natural gas companies. This voluntary Program allows the EPA to collaborate with Partners to promote and track ambitious, transparent commitments to voluntarily reduce methane emissions beyond regulatory requirements and to recognize Partners for their progress. By signing this agreement, Eversource Energy agrees to join the U.S. EPA to reduce methane emissions through a Best Management Practice (BMP) Commitment. The BMP Commitment entails a Partner commitment to company-wide implementation of BMPs to reduce methane emissions from key sources by a future target date. Partners commit to at least one emission source and specify a target year of completion (maximum of five [5] years from commitment start date).

**Partner's Best Management Practice Commitment:** Please specify participating sources, start date, and target achievement year in the table below; check all that apply.

Source	Start Date	Achievement Year
<b>Onshore Production</b>		
<input type="checkbox"/> Pneumatic Controllers		
<input type="checkbox"/> Equipment Leaks/Fugitive Emissions		
<input type="checkbox"/> Liquids Unloading		
<input type="checkbox"/> Pneumatic Pumps		
<input type="checkbox"/> Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
<b>Gathering and Boosting</b>		
<input type="checkbox"/> Pneumatic Controllers		
<input type="checkbox"/> Equipment Leaks/Fugitive Emissions		
<input type="checkbox"/> Pneumatic Pumps		
<input type="checkbox"/> Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
<input type="checkbox"/> Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/> Centrifugal Compressors - Venting		
<b>Natural Gas (NG) Processing</b>		
<input type="checkbox"/> Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/> Centrifugal Compressors - Venting		
<b>NG Transmission &amp; Underground Storage</b>		
<input type="checkbox"/> Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/> Centrifugal Compressors - Venting		
<input type="checkbox"/> Equipment Leaks/Fugitive Emissions		
<input type="checkbox"/> Transmission Pipeline Blowdowns between Compressor Stations		
<input type="checkbox"/> Pneumatic Controllers		
<b>NG Distribution</b>		
<input type="checkbox"/> M&R Stations/City Gates		
<input checked="" type="checkbox"/> Mains – Cast Iron and Unprotected Steel	3/30/16	2021
LDC all(Commitment Rate: 3%)		
<input type="checkbox"/> Services – Cast Iron and Unprotected Steel		
<input type="checkbox"/> Distribution Pipeline Blowdowns (Commitment Rate: )		
<input type="checkbox"/> Excavation Damages		



## **EPA's Responsibilities**

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1. Assign a Methane Challenge Program Representative responsible for assisting the Partner in implementing the Program.
2. Provide relevant Program details, which can be found in the Natural Gas STAR Methane Challenge Program: BMP Framework and Methane Challenge BMP Supplemental Technical Information documents.
3. Assist Partners with Program implementation by:
  - (i) providing relevant technical information;
  - (ii) developing a mechanism for reporting supplemental information;
  - (iii) updating Program information as needed, including updating the list of participating sources and mitigation options covered in the Program; and
  - (iv) answering questions about Program participation.
4. Encourage new and innovative methane emission mitigation technologies, as well as methodologies for monitoring and measuring progress, and incorporate them into the Program.
5. Track Partner progress through provision of a user-friendly reporting system through which Partners can report supplementary data relevant to achieving their Methane Challenge commitments. Supplementary data will be used in conjunction with data that are already collected by Subpart W of the Greenhouse Gas Reporting Program (GHGRP) to track Partner progress.
6. Promote the transparency and visibility of the Methane Challenge Program and member commitments and achievements, by publicly releasing non-confidential data that is submitted either through the Methane Challenge Program or through the GHGRP.
7. Acknowledge Program Partners through announcement of commitments, Implementation Plans, progress, and achievement of goals on the EPA's Methane Challenge website.

## **Natural Gas STAR Methane Challenge Partner's Responsibilities**

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1. Designate a company representative as the Natural Gas STAR Methane Challenge Program Implementation Manager responsible for serving as the contact point concerning implementation of this voluntary agreement.
2. Submit an Implementation Plan within six (6) months of signing this agreement outlining expected activities and milestones for achieving commitments.
3. Specify commitment start date(s), which will be within six (6) months of joining the Program.
4. Implement BMPs for the selected participating sources across company operations to achieve mitigation commitments by the specified commitment target year, not to exceed five (5) years from the specified commitment start date.
5. Report on an annual basis non-CBI supplementary data relevant to achieving Methane Challenge commitments, as outlined in Program documents. Supplementary data will be used in conjunction with data collected by Subpart W of the GHGRP to demonstrate Partner progress within the Program.
6. Communicate participation to employees.

## **General Terms**

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1. This voluntary partnership is intended to promote and recognize voluntary actions taken by oil and gas companies to reduce methane emissions from their operations. It is understood that Partners to this Program may have operations covered by federal, state, and/or other regulatory requirements. It is anticipated that Partners may achieve their Methane Challenge Program commitments through a combination of voluntarily- and regulatorily-driven actions. Participation in this Program does not in any way change legal obligations of Partners to comply with applicable laws regulations.
2. This agreement can be terminated by either party at any time, with no notice or penalties and no further obligation. The EPA agrees not to publicize a Partner's withdrawal from the Program beyond removing the Partner's name from Methane Challenge website. By setting out a target date on this form the Company does not intend to expose itself to regulatory liability if it cannot meet the target date.



3. The Partner agrees that the activities it undertakes connected with this Partnership Agreement are not intended to provide services to the federal government and that the Partner will not seek compensation from a federal agency.
4. The Partner agrees that it will not claim or imply that its participation in the Program constitutes the EPA approval or endorsement of anything other than the commitment to the Program. The Partner cannot use or appropriate the EPA seal or identifier in any way.
5. In order to maintain status as a Partner in the Methane Challenge Program, the Partner agrees to annually report specified supplemental data, per Program reporting specifications.
6. If the Partner is unable to meet a BMP commitment by the target year, and intends to remain in the Program, the Partner company will provide relevant contextual information for the delay and set a new target year. The EPA will note the adjustment to the implementation timeline on the Methane Challenge website.
7. All commitments made by the EPA in this Partnership Agreement are subject to the availability of appropriated funds. Nothing in this Partnership Agreement, in and of itself, obligates the EPA to expend appropriations or to enter into any contract, assistance agreement, interagency agreement, or incur other financial obligations that would be inconsistent with Agency budget priorities. This Partnership Agreement does not exempt the Partner from the EPA policies governing competition for assistance agreements. Any transaction involving reimbursement or contribution of funds between the parties to this Partnership Agreement will be handled in accordance with applicable laws, regulations, and procedures under separate written agreements.

### Signatures and Partner Contact Details

---

Authorized Company Representative: William J. Akley, President Eversource Gas Operations

Signature:  Date: 3-15-16

Authorized U.S. EPA Representative: Paul M. Gunning, Director, Climate Change Division

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Partner's Designated Natural Gas STAR Methane Challenge Implementation Manager:

Name: Ruthanne F. Calabrese

Title: Manager, Environmental Compliance and Performance

Address: 107 Selden Street

City/State/Zip: Berlin, CT 06037

Telephone/Fax: (860)665-6181 E-mail: ruthanne.calabrese@eversource.com

### Instructions

---

Please send this form to: Natural Gas STAR Methane Challenge Program

Standard Mail: Mail Code 6207M  
1200 Pennsylvania Ave NW Washington DC 20460

Overnight Mail: 1201 Constitution Ave NW, Room Number 4353 UU  
Washington DC 20004

**To:** Butcher, Callee (Kern River)[Callee.Butcher@kernrivergas.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Mon 3/14/2016 4:50:16 PM  
**Subject:** RE: Methane Challenge BMP

Good Afternoon Callee,

I'm happy to let you know that the transmission blowdown source is now available and the supplementary technical information document has been updated to include this source (page 11) and is posted on our program website.

Please let me know if you have any additional questions!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Butcher, Callee (Kern River) [mailto:Callee.Butcher@kernrivergas.com]  
**Sent:** Monday, March 14, 2016 12:46 PM  
**To:** Bylin, Carey <Bylin.Carey@epa.gov>; Pryor, Justin <Pryor.Justin@epa.gov>  
**Subject:** Methane Challenge BMP

Carey/Justin,

During our call on March 7, 2016, it was mentioned that supplementary technical information and mitigation options for the transmission and storage best management practice (BMP) of blowdowns between compressor stations would be issued. Both Northern Natural Gas and Kern River Gas Transmission are interested in the details of this BMP. Is there any update as to when this information will be available?

Any information you have would be appreciated.

Thank you,

***Callee Butcher***

*Manager, Land & Environment*

Kern River Gas Transmission

2755 E. Cottonwood Parkway, Suite 300

Salt Lake City, UT 84121

801-937-6056 (office)

801-518-3342 (cell)

[callee.butcher@kernrivergas.com](mailto:callee.butcher@kernrivergas.com)



**To:** Ihle, Jack[Jack.Ihle@xcelenergy.com]  
**Cc:** Campbell, Cheryl F[cheryl.f.campbell@xcelenergy.com]; Zich, Joni H[joni.h.zich@xcelenergy.com]; West, Jeffrey L[jeffrey.l.west@xcelenergy.com]; Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Mon 3/14/2016 12:53:16 PM  
**Subject:** RE: Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

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We look forward to working with you on the Methane Challenge Program.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Ihle, Jack [mailto:Jack.Ihle@xcelenergy.com]  
**Sent:** Friday, March 11, 2016 7:14 PM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Campbell, Cheryl F <cheryl.f.campbell@xcelenergy.com>; Zich, Joni H <joni.h.zich@xcelenergy.com>; West, Jeffrey L <jeffrey.l.west@xcelenergy.com>

**Subject:** Xcel Energy preliminary intention to join Methane Challenge as a Founding Partner

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Please let us know if there is more information to consider at this point, and thank you for the opportunity to participate.

Best,

Jack Ihle

**Xcel Energy | Responsible By Nature**

Director, Environmental Policy & Emerging Technology

1800 Larimer Street, 13<sup>th</sup> Floor Denver, CO 80202

P: 303.294.2262 F: 303.308.7691

E: [jack.ihle@xcelenergy.com](mailto:jack.ihle@xcelenergy.com)

---

**XCELENERGY.COM**

**To:** Webb, Jeff[Jeff.Webb@avistacorp.com]  
**Cc:** Howard, Bruce[Bruce.Howard@avistacorp.com]; Faulkenberry, Mike[mike.faulkenberry@avistacorp.com]; Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Sat 3/12/2016 1:55:02 AM  
**Subject:** RE: AGA - EPA, Founding Partner of Methane Challenge

Hi Jeff,

This is great news! Thank you for letting us know. We will be following up with additional details specific to your company's participation in the launch event, pending your final confirmation. Please note that we have recently revised our Partnership Agreement on the web to allow for modification of the source commitment table if needed: [https://www3.epa.gov/gasstar/documents/MC\\_Partnership\\_Agreement\\_Final.pdf](https://www3.epa.gov/gasstar/documents/MC_Partnership_Agreement_Final.pdf). Currently the Partnership Agreement only includes a mailing address, but you can send a scanned copy of the Partnership Agreement to me via e-mail if that is preferable.

We look forward to working with you on the Methane Challenge Program.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Webb, Jeff [mailto:Jeff.Webb@avistacorp.com]  
**Sent:** Friday, March 11, 2016 3:31 PM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Howard, Bruce <Bruce.Howard@avistacorp.com>; Faulkenberry, Mike <mike.faulkenberry@avistacorp.com>

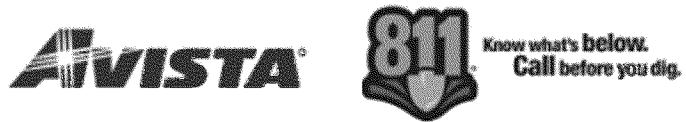
**Subject:** AGA - EPA, Founding Partner of Methane Challenge

Mr. Pryor,

Avista appreciates the offer to participate in your methane emission reduction program. Management is currently evaluating the extent to which we will be able to participate and which categories are most applicable to us as a combined LDC. Please count Avista in as a Founding Partner and expect to receive a Partnership Agreement by March 23<sup>rd</sup> from us.

Have a great weekend!

Jeff Webb, PE | Manager, Gas Engineering and Measurement  
O 509-495-4424 | C 509-714-4674 | 1411 E Mission, MSC-6 | Spokane, WA 99220



**To:** Hesselbach, Andrew J[AJHesselbach@peoplesgasdelivery.com]  
**Cc:** Greco, Bob[Bob.Greco@we-energies.com]; Danihel, Donna[Donna.Danihel@we-energies.com]; McCarty, Matthew G[MGMcCarty@integrysgroup.com]; Rodriguez, Lisa A[LARodriguez@integrysgroup.com]; Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Sat 3/12/2016 1:24:00 AM  
**Subject:** RE: Methane Challenge

Hi Andrew,

This is great news! Thank you for letting us know. We will be following up with additional details specific to your company's participation in the launch event, pending your final confirmation. Please note that we have recently revised our Partnership Agreement on the web to allow for modification of the source commitment table if needed:  
[https://www3.epa.gov/gasstar/documents/MC\\_Partnership\\_Agreement\\_Final.pdf](https://www3.epa.gov/gasstar/documents/MC_Partnership_Agreement_Final.pdf). Currently the Partnership Agreement only includes a mailing address, but you can send a scanned copy of the Partnership Agreement to me via e-mail if that is preferable.

We look forward to working with you on the Methane Challenge Program.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Hesselbach, Andrew J [mailto:AJHesselbach@peoplesgasdelivery.com]  
**Sent:** Friday, March 11, 2016 2:24 PM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Greco, Bob <Bob.Greco@we-energies.com>; Danihel, Donna <Donna.Danihel@we-

energies.com>; McCarty, Matthew G <MGMcCarty@integrysgroup.com>; 'placey@aga.org'  
<placey@aga.org>; Hesselbach, Andrew J <AJHesselbach@peoplesgasdelivery.com>;  
Rodriguez, Lisa A <LARodriguez@integrysgroup.com>

**Subject:** Methane Challenge

Justin,

WEC Energy Group appreciates the opportunity to participate in this program and are notifying you that Peoples Gas is planning on joining as a Founding Partner of the Methane Challenge. We look forward to additional information and communications as we move forward. We will be in contact with you on who we are sending to the signing ceremony.

Thank you,

**Andrew J. Hesselbach**

**Vice President, Construction**

**Peoples Gas**

**(312) 240-5311**

**To:** Fatzinger, Bob[RFATZINGER@sjindustries.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Sat 3/12/2016 1:09:39 AM  
**Subject:** RE: EPA Methane Challenge Founding Partner Interest

Hello Robert,

This is great news, thank you for letting us know. We will be following up with additional details specific to your company's participation in the launch event, pending your final confirmation. Please note that we have revised our Partnership Agreement on the web to allow for modification of the source commitment table if needed:  
[https://www3.epa.gov/gasstar/documents/MC\\_Partnership\\_Agreement\\_Final.pdf](https://www3.epa.gov/gasstar/documents/MC_Partnership_Agreement_Final.pdf). Currently the Partnership Agreement only includes a mailing address, but you can send a scanned copy of the Partnership Agreement to me via e-mail if that is preferable.

We look forward to working with you on the Methane Challenge Program.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Fatzinger, Bob [mailto:RFATZINGER@sjindustries.com]  
**Sent:** Friday, March 11, 2016 3:07 PM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Subject:** EPA Methane Challenge Founding Partner Interest

Good afternoon Justin,

I am writing to let you know that South Jersey Gas, the local gas distribution company serving Southern New Jersey, is seriously considering becoming a Founding Partner of the EPA Methane Challenge Program. I will respond back to you on or before the March 23<sup>rd</sup> deadline to confirm for sure whether we will be participating as a Founding Partner.

If you have questions or need additional information, please do not hesitate to contact me. My contact information is included below.

Robert Fatzinger

Sr. Vice President – Engineering Services & System Integrity

South Jersey Gas

1 South Jersey Plaza

Folsom, NJ 08037

(609) 561-9000 X-4193

[rfatzinger@sjindustries.com](mailto:rfatzinger@sjindustries.com)

---

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**To:** Pryor, Justin[Pryor.Justin@epa.gov]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]; pheymborne@nisource.com[pheymborne@nisource.com]  
**From:** mturman@nisource.com  
**Sent:** Fri 3/11/2016 11:08:28 PM  
**Subject:** RE: Excavation Damages Questions

Justin,

Thank you for the detailed response. I think we now have all the information that we need but we will follow-up with you if new questions arise.

Have a great weekend.

Sincerely,

Maureen Turman  
NiSource, Director Environmental Policy  
801 East 86th Avenue  
Merrillville, IN 46410  
Office: 219.647.4887  
Mobile: 219.680.8628

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From: "Pryor, Justin" <Pryor.Justin@epa.gov>  
To: "mturman@nisource.com" <mturman@nisource.com>, "pheymborne@nisource.com" <pheymborne@nisource.com>,  
Cc: "Bylin, Carey" <Bylin.Carey@epa.gov>  
Date: 03/11/2016 02:46 PM  
Subject: RE: Excavation Damages Questions

---

Good Afternoon Maureen and Paul,

We are happy to assist! And I want to apologize for the delayed reply to these questions from Paul's original request. If you need more clarity, a call may be beneficial. Let me know!

- Total number of (**reported**) excavation damages per class location. **What are the class locations?**

This is a reference to DOT-PHMSA classifications. DOT defines class locations by population, clustering and number of buildings within a specified area around the pipeline. [Here is a link](#) to the official breakdown of class locations (it gets quite specific). We plan to amend (shortly) the supplementary technical information document to make this an *optional* reporting element due to the amount of questions we have received.

- Total number of (**reported**) excavation damages in which pipeline was shut in. **What exactly does this mean?**

By “shut in” we mean “shut down,” when the flow of gas has stopped (and after a few questions on this we intend to revise the terminology in the supplementary technical information document back to “shut down” very shortly). What we intend is to receive the total number of excavation damages that resulted in the affected/damaged line being shut down.

- Total number of (**reported**) excavation damages where the operator was given prior notification of excavation activity. **Does this mean that a Locate Ticket Request was called in to 811? Who is the "operator" - the external party that causes an excavation damage, or the LDC that owns the pipe?**

Our intent for this reporting element is that, if an operator was aware of the excavation activities being conducted (whether they were planned/initiated by the operator, or were given notice through the one call process, etc.), then we are requesting the total number of those instances. In this context *operator* is referring to the entity that manages and controls the pipeline; the LDC.

- Total number of (**reported**) excavation damages by type that caused excavation damage incidents. **What do you mean by type? Do you mean work type such as Sewer, Electric, Water, Pipeline, etc.?**

There is a footnote on this reporting element in our Supplementary Technical Information document that lists the types of damage (here is the list: Contractor, Railroad, County, State, Developer, Utility, Farmer, Municipality, Occupant, Unknown/Other, Data not collected).

- Total number of (**reported**) excavation damages by apparent root cause. **Is this the 4: No One-Call, Locator Error, Excavator Error, Poor Records?**

There is a footnote on this reporting element in our Supplementary Technical Information document that lists the types of damages by apparent root cause (here is the list: One-Call Notification Practices, Locating Practices, or Excavation Practices not Sufficient; One-Call Notification Center Error, Abandoned Facility, Deteriorated Facility, Previous Damage, Data not Collected, Other Outside Force Damage, Pipe, Weld or Joint Failure, Equipment Failure, Incorrect Operation, Other/Miscellaneous).

- ☐☐☐☐ Total number of excavation damages on pipelines or facilities with supervisory control and data acquisition-based systems in place

What is meant by "facilities with supervisory control and data acquisition-based systems in place"?

“SCADA” systems are systems for remote monitoring and controls that operate with coded signals over communication channels. SCADA systems would show changes in operating conditions. We can discuss this further, but if your company does not employ SCADA, then this reporting element would be blank.

I hope that I was able to answer all your questions, I combined some questions from the original request that were not in this one. Again, please let me know if you have any further questions and if a call would be beneficial.

Respectfully,

Justin

Justin Pryor  
Climate Change Division  
U.S. Environmental Protection Agency  
202-343-9258

**From:** mturman@nisource.com [mailto:mturman@nisource.com]  
**Sent:** Thursday, March 10, 2016 12:30 PM  
**To:** Bylin, Carey <Bylin.Carey@epa.gov>; Pryor, Justin <Pryor.Justin@epa.gov>  
**Subject:** Excavation Damages Questions

Good Afternoon,

NiSource is working on our analysis of the Natural Gas Star Methane Challenge Excavation Damages metrics and Pam Lacy suggested that I contact you for some clarification on the following questions:

- Total number of (**reported**) excavation damages per class location. **What are the class locations?**
- Total number of (**reported**) excavation damages in which pipeline was shut in. **What exactly does this mean?**
- Total number of (**reported**) excavation damages where the operator was given prior notification of excavation activity. **Does this mean that a Locate Ticket Request was called in to 811?**
- Total number of (**reported**) excavation damages by type that caused excavation damage incidents. **What do you mean by type? Do you mean work type such as Sewer, Electric, Water, Pipeline, etc.?**
- Total number of (**reported**) excavation damages by apparent root cause. **Is this the 4: No One-Call, Locator Error, Excavator Error, Poor Records?**

**We are working to finalize our commitment by the end of this week - so any guidance you could provide would be appreciated.**

Sincerely,

Maureen Turman  
NiSource, Environmental Policy  
801 East 86th Avenue  
Merrillville, IN 46410  
Office: 219.647.4887  
Mobile: 219.680.8628

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**To:** mturman@nisource.com[mturman@nisource.com];  
pheyborne@nisource.com[pheyborne@nisource.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Fri 3/11/2016 8:46:33 PM  
**Subject:** RE: Excavation Damages Questions

Good Afternoon Maureen and Paul,

We are happy to assist! And I want to apologize for the delayed reply to these questions from Paul's original request. If you need more clarity, a call may be beneficial. Let me know!

- Total number of (**reported**) excavation damages per class location. **What are the class locations?**

This is a reference to DOT-PHMSA classifications. DOT defines class locations by population, clustering and number of buildings within a specified area around the pipeline. [Here is a link](#) to the official breakdown of class locations (it gets quite specific). We plan to amend (shortly) the supplementary technical information document to make this an *optional* reporting element due to the amount of questions we have received.

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- ☐☐☐☐☐☐☐☐ Total number of excavation damages on pipelines or facilities with supervisory control and data acquisition-based systems in place

What is meant by "facilities with supervisory control and data acquisition-based systems in place"?

"SCADA" systems are systems for remote monitoring and controls that operate with coded signals over communication channels. SCADA systems would show changes in operating conditions. We can discuss this further, but if your company does not employ SCADA, then this reporting element would be blank.

I hope that I was able to answer all your questions, I combined some questions from the original request that were not in this one. Again, please let me know if you have any further questions and if a call would be beneficial.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** mturman@nisource.com [mailto:mturman@nisource.com]  
**Sent:** Thursday, March 10, 2016 12:30 PM  
**To:** Bylin, Carey <Bylin.Carey@epa.gov>; Pryor, Justin <Pryor.Justin@epa.gov>  
**Subject:** Excavation Damages Questions

Good Afternoon,

NiSource is working on our analysis of the Natural Gas Star Methane Challenge Excavation Damages metrics and Pam Lacy suggested that I contact you for some clarification on the following questions:

- Total number of (**reported**) excavation damages per class location. **What are the class locations?**
- Total number of (**reported**) excavation damages in which pipeline was shut in. **What exactly does this mean?**
- Total number of (**reported**) excavation damages where the operator was given prior notification of excavation activity. **Does this mean that a Locate Ticket Request was called in to 811?**
- Total number of (**reported**) excavation damages by type that caused excavation damage incidents. **What do you mean by type? Do you mean work type such as Sewer, Electric, Water, Pipeline, etc.?**
- Total number of (**reported**) excavation damages by apparent root cause. **Is this the 4: No One-Call, Locator Error, Excavator Error, Poor Records?**

**We are working to finalize our commitment by the end of this week - so any guidance you could provide would be appreciated.**

Sincerely,

Maureen Turman  
NiSource, Environmental Policy  
801 East 86th Avenue  
Merrillville, IN 46410  
Office: 219.647.4887  
Mobile: 219.680.8628

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**To:** Ted Shreve[ted.shreve@uinet.com]  
**Cc:** Alex DeBoissiere[Alex.DeBoissiere@uinet.com]; r kump[robert.kump@iberdrolausa.com]; s duncan[sheila.duncan@iberdrolausa.com]; Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Fri 3/11/2016 6:17:28 PM  
**Subject:** RE: AVANGRID-US EPA Methane Challenge  
Methane Challenge Launch Event.pdf

Mr. Shreve,

This is great news, thank you for letting us know. Attached is information on the launch event if you are interested in attending.

Please let me know if you have any questions. We look forward to hopefully working with you on the Methane Challenge Program.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Ted Shreve [mailto:ted.shreve@uinet.com]  
**Sent:** Friday, March 11, 2016 10:52 AM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Alex DeBoissiere <Alex.DeBoissiere@uinet.com>; r kump <robert.kump@iberdrolausa.com>; s duncan <sheila.duncan@iberdrolausa.com>; Lacey, Pam <PLacey@aga.org>  
**Subject:** AVANGRID-US EPA Methane Challenge



Mr. Pryor;

On behalf of AVANGRID, I would like to inform you that we are considering joining as a Founding Partner on this program.

If you have any questions or need a point of contact regarding, please do not hesitate to reach me using the contact information below.

Thank you and best regards,

Ted Shreve

Ted A. Shreve

Senior Director, Environmental & Facilities Services

UIL Holdings Corporation

180 Marsh Hill Road

Orange, CT 06477

Office: 203-499-3566

Cell: (b)(6) personal privacy

Email: [ted.shreve@uinet.com](mailto:ted.shreve@uinet.com)



## **Methane Challenge Program Launch**

EPA will launch the Methane Challenge Program with founding partners at the Global Methane Forum on March 30, 2016, in Washington, D.C. Following are key logistical details and dates for companies who are considering joining the Program as a founding partner.<sup>1</sup>

### **Program Launch Event Logistics**

#### **Key Dates:**

March 11: Companies considering joining as founding partners to inform EPA of their interest<sup>2</sup>

March 23: Companies to finalize with EPA whether they will join as founding partner

March 30: Launch event

#### **EPA Contact Information:**

Carey Bylin, EPA - [Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov) or 202-343-9669

Justin Pryor, EPA – [Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov) or 202-343-9258

#### **Launch Date and Agenda:**

The launch event will take place on March 30, 2016, at 10:00am, following the Plenary Session – Policy Roundtable: Different Approaches to Methane Policies. Janet McCabe, EPA's Acting Assistant Administrator for Air and Radiation, will host the event recognizing Methane Challenge founding partners.

#### **Global Methane Forum Overview**

The 2016 Global Methane Forum will serve as the premier event for international collaboration on methane mitigation, recovery, and use. Methane experts from around the globe will gather to discuss policy and financing options, as well as the latest technology in the oil and gas, coal mining, agriculture, municipal solid waste, and waste water sectors. Jointly organized by the Global Methane Initiative and the Climate and Clean Air Coalition, the Global Methane Forum will convene global leaders to discuss methane mitigation opportunities and challenges, including technologies, policies, and financing. The event will feature high-level speakers from the United States and other countries, with Gina McCarthy, USEPA's Administrator invited for the opening keynote.

#### **Agenda and Registration: [www.globalmethane.org/forum](http://www.globalmethane.org/forum)**

Attendees are responsible for their own travel and lodging expenses.

#### **Global Methane Forum Event Location:**

Georgetown University Hotel and Conference Center

3800 Reservoir Road, NW

Washington, DC 20057

202-687-3200

---

<sup>1</sup> EPA will recognize all founding partners at the launch event, even if they are not able to participate in person.

<sup>2</sup> For internal planning purposes only; this is not a commitment to EPA that a company will become a founding partner.

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**Cc:** PLacey@aga.org[PLacey@aga.org]; mturman@nisource.com[mturman@nisource.com]; mbanas@nisource.com[mbanas@nisource.com]; pheyborne@nisource.com[pheyborne@nisource.com]  
**From:** KCarmichael@NiSource.com  
**Sent:** Fri 3/11/2016 5:40:25 PM  
**Subject:** EPA Methane Challenge

Hi Carey,

Hope all is well. Thank you for all your efforts in developing the Methane Challenge program and for working with AGA and others to get the program in a really good place. We are excited to be able to participate and be founding members. We are working through final internal approvals and should have agreement forms to you before the 23rd. Currently, pending final approval, we have the following companies that have a strong interest in joining:

NiSource (holding company)  
Columbia Gas of Ohio  
Columbia Gas of Pennsylvania  
Columbia Gas of Maryland  
Columbia Gas of Virginia  
Columbia Gas of Massachusetts  
Northern Indiana Public Service Company (pending response on excavation damages data requirements from your team)

Also, I am available March 30th for the Launch Event as appropriate.

Thank you again. We are looking forward to being active members of the Methane Challenge.

Kelly R. Carmichael  
Vice President, Environmental & Sustainability  
NiSource  
(219) 647-5312

**To:** mgreene@scana.com[mgreene@scana.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Thur 3/10/2016 8:43:23 PM  
**Subject:** RE: EPA Voluntary Methane Challenge - Opportunity to Join as a Founding Partner

Good Afternoon Mike,

I apologize for the delayed response to your email. Would you be available for a call to discuss this topic with us sometime tomorrow? Possibly either at 11:00AM, or anytime between 1:30 - 3:30PM?

Thank you for your consideration in the Methane Challenge Program, and I hope we can get your questions answered to your satisfaction as soon as possible!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** GREENE, MICHAEL B [<mailto:MGREENE@scana.com>]  
**Sent:** Friday, February 26, 2016 12:24 PM  
**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** FW: EPA Voluntary Methane Challenge - Opportunity to Join as a Founding Partner

Carey, Pam Lacey with AGA directed my question to you regarding the Voluntary Methane Challenge. My question is as follows:

I'm reviewing the program based on an email and interest from our Senior Vice President. SCANA has eliminated all cast iron and unprotected bare steel so we can't participate on that basis. Our best option to participate would be based on excavation damages as we are already collecting most of that data with the exception that we do not perform class location studies of our distribution systems. However, we do have data on population densities around our facilities if that is or could be an option to collecting and reporting by class location. Implementing and maintaining a class location study would require some major process work, new data maintenance, and frankly significant expense for this purpose. So I was hoping to find someone to address a tactical question to, such as is there any flexibility to collect and report the consequence aspects of excavation damage data with data sets other than class locations – again population/census data as an example? Thanks for any insight or even a referral on to someone else who may be able to assist.

Mike Greene, PE

General Manager

Engineering Services

SCANA

803-217-9191

[mgreene@scana.com](mailto:mgreene@scana.com)

**From:** McCurdy, Dave [<mailto:DMcCurdy@aga.org>]

**Sent:** Tuesday, February 23, 2016 12:10 PM

**To:** AGA Members <[AGAMembers@aga.org](mailto:AGAMembers@aga.org)>

**Subject:** EPA Voluntary Methane Challenge - Opportunity to Join as a Founding Partner

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---

February 23, 2016

TO: AGA Board of Directors and Member Delegates

RE: Opportunity to Join EPA Voluntary Methane Challenge as Founding Partner

At the recent AGA Board of Directors Meeting on February 17, we reported that EPA plans to launch its voluntary Methane Challenge program at the end of March in Washington, D.C. I am writing to ensure that all AGA member companies are aware of the opportunity to participate in this event as a “Founding Partner” at 10 a.m. on Wednesday, March 30, 2016 at EPA’s Global Methane Forum in Washington. EPA will soon provide additional details and will confirm whether EPA Administrator Gina McCarthy or Janet McCabe, EPA Assistant Administrator for Air and Radiation, will preside at the ceremony. Please note that companies that are not ready to join as “Founding Partners” on March 30 may join at any time as a partner of the Methane Challenge on a rolling basis.

AGA is generally pleased with the final program details for natural gas distribution. EPA accepted most of AGA’s requested changes in the best practices, including an option to join either at the LDC level or at the holding company level. The flexibility built into the final program should allow most, if not all, AGA members to participate in this voluntary methane reduction program consistent with their current state utility commission authorizations. At the AGA Board Winter Meeting, the Board Natural Gas Emissions Task Force recommended robust AGA member participation in order to help demonstrate the voluntary activity underway by the industry.

A summary of the EPA Methane Challenge program is attached. For further information, please contact Pam Lacey, AGA Chief Regulatory Counsel, at 202-824-7340 or [placey@aga.org](mailto:placey@aga.org).



**Dave McCurdy | President and Chief Executive Officer**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7111 | F: 202-824-7098 | [dmccurdy@aga.org](mailto:dmccurdy@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to over 69 million customers throughout the nation.

**To:** Bylin, Carey[Bylin.Carey@epa.gov]; Pryor, Justin[Pryor.Justin@epa.gov]  
**From:** mturman@nisource.com  
**Sent:** Thur 3/10/2016 5:29:33 PM  
**Subject:** Excavation Damages Questions

Good Afternoon,

NiSource is working on our analysis of the Natural Gas Star Methane Challenge Excavation Damages metrics and Pam Lacy suggested that I contact you for some clarification on the following questions:

- Total number of (**reported**) excavation damages per class location. **What are the class locations?**
- Total number of (**reported**) excavation damages in which pipeline was shut in. **What exactly does this mean?**
- Total number of (**reported**) excavation damages where the operator was given prior notification of excavation activity. **Does this mean that a Locate Ticket Request was called in to 811?**
- Total number of (**reported**) excavation damages by type that caused excavation damage incidents. **What do you mean by type? Do you mean work type such as Sewer, Electric, Water, Pipeline, etc.?**
- Total number of (**reported**) excavation damages by apparent root cause. **Is this the 4: No One-Call, Locator Error, Excavator Error, Poor Records?**

**We are working to finalize our commitment by the end of this week - so any guidance you could provide would be appreciated.**

Sincerely,

Maureen Turman  
NiSource, Environmental Policy  
801 East 86th Avenue  
Merrillville, IN 46410  
Office: 219.647.4887  
Mobile: 219.680.8628

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**To:** Ned Farquhar[NFarquhar@vermontgas.com]; John St.Hilaire[jsthilaire@vermontgas.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Wed 3/9/2016 8:55:19 PM  
**Subject:** RE: STAR announcement  
Methane Challenge Launch Event.pdf

Hi Ned,

We are so glad you are able to attend the launch event, thank you for letting us know. EPA will be coordinating the event and initiating all announcements. We plan to send out welcome letters to all new members very shortly, which will provide some next steps for partners. In the interim, attached is information on the launch event itself.

Thank you for reaching out, and you will hear from us again very soon with additional information.

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Ned Farquhar [mailto:NFarquhar@vermontgas.com]  
**Sent:** Tuesday, March 08, 2016 4:36 PM  
**To:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Cc:** Franklin, Pamela <Franklin.Pamela@epa.gov>; Pryor, Justin <Pryor.Justin@epa.gov>; John St.Hilaire <jsthilaire@vermontgas.com>  
**Subject:** STAR announcement

Hi Carey – Responding to your Feb 25 confirmation that Vermont Gas is a natural gas star methane challenge program participant (perhaps the first to respond, sounds like). We'd like to be involved in the announcement. Either I or our CEO will attend. We have heard AGA is pulling together some info. Do you know who I would contact there? Or are you running the announcement from there?

Thanks,

Ned

Ned Farquhar

Vermont Gas

VP, Communications and Government

cell: 222-1038

## **Methane Challenge Program Launch**

EPA will launch the Methane Challenge Program with founding partners at the Global Methane Forum on March 30, 2016, in Washington, D.C. Following are key logistical details and dates for companies who are considering joining the Program as a founding partner.<sup>1</sup>

### **Program Launch Event Logistics**

#### **Key Dates:**

March 11: Companies considering joining as founding partners to inform EPA of their interest<sup>2</sup>

March 23: Companies to finalize with EPA whether they will join as founding partner

March 30: Launch event

#### **EPA Contact Information:**

Carey Bylin, EPA - [Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov) or 202-343-9669

Justin Pryor, EPA – [Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov) or 202-343-9258

#### **Launch Date and Agenda:**

The launch event will take place on March 30, 2016, at 10:00am, following the Plenary Session – Policy Roundtable: Different Approaches to Methane Policies. Janet McCabe, EPA's Acting Assistant Administrator for Air and Radiation, will host the event recognizing Methane Challenge founding partners.

#### **Global Methane Forum Overview**

The 2016 Global Methane Forum will serve as the premier event for international collaboration on methane mitigation, recovery, and use. Methane experts from around the globe will gather to discuss policy and financing options, as well as the latest technology in the oil and gas, coal mining, agriculture, municipal solid waste, and waste water sectors. Jointly organized by the Global Methane Initiative and the Climate and Clean Air Coalition, the Global Methane Forum will convene global leaders to discuss methane mitigation opportunities and challenges, including technologies, policies, and financing. The event will feature high-level speakers from the United States and other countries, with Gina McCarthy, USEPA's Administrator invited for the opening keynote.

#### **Agenda and Registration: [www.globalmethane.org/forum](http://www.globalmethane.org/forum)**

Attendees are responsible for their own travel and lodging expenses.

#### **Global Methane Forum Event Location:**

Georgetown University Hotel and Conference Center

3800 Reservoir Road, NW

Washington, DC 20057

202-687-3200

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<sup>1</sup> EPA will recognize all founding partners at the launch event, even if they are not able to participate in person.

<sup>2</sup> For internal planning purposes only; this is not a commitment to EPA that a company will become a founding partner.

**To:** Dickersbach, Melanie Carrow:(BSC)[Melanie.Dickersbach@exeloncorp.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Wed 3/9/2016 7:59:19 PM  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Hi Melanie,

I hope our conversation yesterday was helpful. As you requested during the call, here are the answers to the questions below, in writing (as well as to your most recent question):

- Can you confirm that we could do a commitment based on the Exelon utilities' combined inventory of cast iron and unprotected steel. (Combined they would be in Tier 4 – with or without the merger)
  - Yes, Exelon may combine each utilities' inventory of cast iron and unprotected steel, and the collective replacement rate would be based on the corresponding Tier.
- Should ductile iron be included in the mile count for cast iron?
  - Yes.
- How about coated unprotected steel or bare protected steel?
  - The GHGRP collects information separately between “protected steel” and “unprotected steel.” Similarly, Methane Challenge is focused on replacement of unprotected steel and partners should only count unprotected steel in their inventory of pipe and associated replacement rates.
- What is the latest date that we would let you know whether we would be able to make this commitment?
  - We are looking for a firm signal from companies wishing to be Founding Partners by March 23, and would prefer to receive the Partnership Agreement at that time, as well. However, we do understand that the Partnership Agreement may take time to be thoroughly reviewed and approved by your company, so submission by March 29 is acceptable, as well.
- If you set a goal to reach your Tier rate in 3 years – and say you exceed it in the first year – are you seen to have achieved that goal and immediately switch over to the maintain part of the goal, or is it recognized that during those first three years that there might be flux in the annual rate as you get the program established – so you would still have the full three years to make sure you can maintain that rate.

- If three years is your commitment achievement date, you will have the full three years to “work up” to achieving that replacement rate. The goal is then to maintain the replacement rate for five years *after* your designated commitment achievement date.
- After five years following your commitment achievement date, Partners will be requested to evaluate their ability to commit to a higher rate. Partners can also raise their committed rate at any time.

Please let me know if you need any further clarification. Thank you again, for you interest in the Program!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Dickersbach, Melanie Carrow:(BSC) [mailto:Melanie.Dickersbach@exeloncorp.com]  
**Sent:** Wednesday, March 09, 2016 9:59 AM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Hi Justin –

Thanks again for your time yesterday. There was one last question that came up. If you set a goal to reach your Tier rate in 3 years – and say you exceed it in the first year – are you seen to have achieved that goal and immediately switch over to the maintain part of the goal, or is it recognized that during those first three years that there might be flux in the annual rate as you get the program established – so you would still have the full three years to make sure you can maintain that rate.

Hope that makes sense.

Please give me a call on my cell 215-316-8426 if it is easier to discuss.

Thanks again for your assistance with all this,

Melanie

**From:** Dickersbach, Melanie Carrow:(BSC)  
**Sent:** Monday, March 07, 2016 3:18 PM  
**To:** 'Pryor, Justin'  
**Cc:** Bylin, Carey  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Hi Justin –

Thanks so much for your quick reply. I hesitated in responding as we had thought we'd hear about the PHI merger last week, but unfortunately the final decision has still not been made. If the merger goes through, Exelon utilities with natural gas piping would include BGE, PECO and Delmarva Gas - and we would hope to make the commitment to cover all. If the merger does not go through – it would be just BGE and PECO included as Exelon Utilities with natural gas systems (ComEd does not have natural gas).

• Can you confirm that we could do a commitment based on the Exelon utilities'

combined inventory of cast iron and unprotected steel. (Combined they would be in Tier 4 – with or without the merger)

- Should ductile iron be included in the mile count for cast iron? How about coated unprotected steel or bare protected steel?
- What is the latest date that we would let you know whether we would be able to make this commitment?

Thanks so much for your help with this,

Melanie

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]  
**Sent:** Thursday, February 25, 2016 2:49 PM  
**To:** Dickersbach, Melanie Carrow:(BSC)  
**Cc:** Bylin, Carey  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Good Morning Melanie,

We are very pleased to hear of your interest in joining the Methane Challenge Program.

In response to your questions, yes, you may join as a corporation if each of the utilities has already been a member of Gas STAR and reports separately under subpart W. The utilities may continue as Gas STAR members if they would like, we will just need to work out avoiding duplicative reporting of emissions reductions (this would not need to be worked out before signing up).

As far as joining as a corporation or as separate partners, you may take either approach, based on your preference. Are BGE and PECO the only subsidiary LDCs of Exelon?

With regard to your last question about making a modified commitment, we feel that partners would stay within the Tiered approach as laid out in the Program technical information document. It would be apparent through the transparent reporting process that the commitment put forward in the Partnership Agreement to reach the 3% replacement rate within three years would be achieved, but part of that commitment is to maintain at least that rate moving forward for the next five years. We understand that resource limitations may affect operations within 12 month periods, and we would certainly work with you if a commitment cannot be achieved, possibly through providing an explanation to accompany the data for that year to be transparent on the website.

Please let me know if you have any further questions, or if a call may be more beneficial to discuss specific points, I would be glad to set something up. Again, thank you for your interest and we look forward to working with you!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Dickersbach, Melanie Carrow:(BSC) [<mailto:Melanie.Dickersbach@exeloncorp.com>]

**Sent:** Thursday, February 25, 2016 10:58 AM

**To:** Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>

**Cc:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>

**Subject:** FW: Natural Gas STAR Methane Challenge Program

Hi Justin –



I am with Exelon Corporation, the parent company of BGE and PECO, and we have been exploring different options for joining the Natural Gas STAR Methane Challenge Program.

- Could we join as a corporation if each of the utilities has already individually been a member of Natural Gas Star and reports separately under Part 98 Subpart W?
- If we joined as a corporation – would we pool the inventory of our owned utilities to determine our replacement rate tier, or would they need to each set different commitment levels based on their individual inventories of piping? Individually BGE and PECO would be Tier 3, but combined they would be Tier 2.
- Also, could a corporation make a similar type of commitment – but slightly modified – such that they replaced a certain percent by a certain date, thereby affording a bit more freedom to spread the work out over the years as they were able to get it done. (For example – target reaching a 3% replacement rate in three years and maintain that rate for an additional 2 years – but the formal commitment be to replace 12.5% over 5 years). There is always the potential for emergent work associated with damaged system lines or other redirection that could compete with a work plan in any given calendar year – and resource limitations could cause having to shuffle timing for projects between 12 month periods.

Thanks for your help with this. This looks like a great initiative and we would love to be able to participate if we can.

Sincerely,

Melanie Dickersbach

Climate and Environment Strategy Manager

2301 Market Street S23-3

Philadelphia, PA 19103

Office: 215.841.6371 | Cell: 215.316.8426

[melanie.dickersbach@exeloncorp.com](mailto:melanie.dickersbach@exeloncorp.com) [www.exeloncorp.com](http://www.exeloncorp.com)

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]  
**Sent:** Tuesday, February 23, 2016 11:29 AM  
**To:** King, Theresa S:(BGE)  
**Cc:** Bylin, Carey  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Good Morning Ms. King,

I am a colleague of Ms. Bylin, and can hopefully answer your questions. First off, we are excited to hear of your interest in the Program! And thank you for reaching out, as well.

The replacement rate commitment is something a partner would work towards over their 5 year commitment. If you were to sign up this March, for example, you would choose a commitment start date between the March and August/September (2016) timeframe. You would then have until August/September of 2021 to achieve and maintain moving forward at least a 3% annual replacement rate.

We have yet to work out all of the details regarding partners that do not meet their commitments, but we certainly plan to work with our partners in any way we can to assist in accomplishing their goals. I can say with confidence that we wouldn't highlight that a company did not achieve a commitment. I can discuss this further with my team and get back to you with more information, though.

Please let me know if you have any further questions, and again, we're excited to work with you!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** King, Theresa S:(BGE) [<mailto:Theresa.King@bge.com>]

**Sent:** Tuesday, February 23, 2016 8:51 AM

**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>

**Subject:** Natural Gas STAR Methane Challenge Program

Hi Ms. Bylin,

I work for Baltimore Gas and Electric and we are looking into joining the Natural Gas STAR Methane Challenge Program.

We were looking at making a commitment for replacing cast iron and unprotected steel mains. When I look at the chart in the Technical Information document it looks like we would fall in Tier 3 which would require a 3% annual replacement. We are planning to meet that in 2016 but it is going to be close. Is the commitment for every year or over the next 5 years? And what happens if a partner does not meet their commitment?

Thanks,

Theresa

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Brad.Morello@Shell.com  
**Sent:** Tue 3/8/2016 10:13:31 PM  
**Subject:** RE: Methane Challenge (Shell)

Perfect and thanks!

**From:** Bylin, Carey [mailto:Bylin.Carey@epa.gov]  
**Sent:** Tuesday, March 08, 2016 2:49 PM  
**To:** Morello, Brad SEPCO-URS/M/PN  
**Subject:** RE: Methane Challenge (Shell)

Hi Brad,

Yes, that is included in the Supplementary Technical Information on the website:  
[https://www3.epa.gov/gasstar/documents/MC\\_Onshore\\_Supp\\_Tech\\_Info.pdf](https://www3.epa.gov/gasstar/documents/MC_Onshore_Supp_Tech_Info.pdf), which outlines the Mitigation Options (which apply to all sectors) and the Reporting (which is different for Gathering & Boosting as compared to Processing, Transmission and Storage). I hope this helps. Please let me know if you have further questions.

---

Ms. Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

Global Methane Initiative

U.S. Environmental Protection Agency

Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)

1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460



**From:** Brad.Morello@Shell.com [mailto:Brad.Morello@Shell.com]  
**Sent:** Tuesday, March 08, 2016 11:00 AM  
**To:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Subject:** RE: Methane Challenge (Shell)

Hello Carey,

Quick question – is there a finalized BMP for “Reciprocating Compressors – Rod Packing Vent” under “Gathering and Boosting”?

Thank you,

Brad

**From:** Bylin, Carey [mailto:Bylin.Carey@epa.gov]  
**Sent:** Thursday, February 25, 2016 11:45 AM  
**To:** Morello, Brad SEPCO-URS/M/PN  
**Subject:** RE: Methane Challenge (Shell)

Hi Brad,

Thank you for getting in touch and my apologies for the delay. I will call you this afternoon.

---

Ms. Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

Global Methane Initiative

U.S. Environmental Protection Agency

Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)

1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460



**From:** [Brad.Morello@Shell.com](mailto:Brad.Morello@Shell.com) [mailto:[Brad.Morello@Shell.com](mailto:Brad.Morello@Shell.com)]

**Sent:** Thursday, February 25, 2016 12:09 PM

**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>

**Subject:** Methane Challenge (Shell)

Hello Carey,

Hope all is well and imagine you guys are very busy these days.

If you have some time in the near future would like to discuss the Methane Challenge. My mobile number is Ex. 6 - Personal Privacy

Thank you,

Brad

Brad Morello  
Science & Policy Advisor – Air

Shell Exploration & Production Company

150 North Dairy Ashford, A456-G

Houston, Texas 77079

Tel: + 1.832.337.6347

Email: [brad.morello@shell.com](mailto:brad.morello@shell.com)

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**Cc:** flowe@nisource.com[flowe@nisource.com]  
**From:** vwagner@cpg.com  
**Sent:** Tue 3/8/2016 9:23:02 PM  
**Subject:** Methane Challenge

Hello Ms. Bylin,

I am writing to let you know that Columbia Pipeline Group is considering joining the Methane Challenge program as a founding member.

Please let me know if you need any additional information at this time.

Kindest Regards,  
Victoria Wagner  
Director, Environmental  
Columbia Pipeline Group  
713-386-3565



**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Brad.Morello@Shell.com  
**Sent:** Tue 3/8/2016 3:59:53 PM  
**Subject:** RE: Methane Challenge (Shell)

Hello Carey,

Quick question – is there a finalized BMP for “Reciprocating Compressors – Rod Packing Vent” under “Gathering and Boosting”?

Thank you,

Brad

**From:** Bylin, Carey [mailto:Bylin.Carey@epa.gov]  
**Sent:** Thursday, February 25, 2016 11:45 AM  
**To:** Morello, Brad SEPCO-URS/M/PN  
**Subject:** RE: Methane Challenge (Shell)

Hi Brad,

Thank you for getting in touch and my apologies for the delay. I will call you this afternoon.

---

Ms. Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

Global Methane Initiative

U.S. Environmental Protection Agency

Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)

1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460



**From:** [Brad.Morello@Shell.com](mailto:Brad.Morello@Shell.com) [mailto:[Brad.Morello@Shell.com](mailto:Brad.Morello@Shell.com)]

**Sent:** Thursday, February 25, 2016 12:09 PM

**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>

**Subject:** Methane Challenge (Shell)

Hello Carey,

Hope all is well and imagine you guys are very busy these days.

If you have some time in the near future would like to discuss the Methane Challenge. My mobile number is Ex. 6 - Personal Privacy

Thank you,

Brad

Brad Morello  
Science & Policy Advisor – Air

Shell Exploration & Production Company

150 North Dairy Ashford, A456-G

Houston, Texas 77079

Tel: + 1.832.337.6347

Email: [brad.morello@shell.com](mailto:brad.morello@shell.com)

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** pheystone@nisource.com  
**Sent:** Mon 3/7/2016 7:27:26 PM  
**Subject:** RE: Methane Challenge Excavation Damage Questions

Yes, that works. Thank you!

**Paul R. Heyborne**  
Environmental Coordinator 3  
NiSource, Environmental Policy  
Office: (219) 647-5244  
Cell: (219) 381-5723

From: "Bylin, Carey" <Bylin.Carey@epa.gov>  
To: "pheystone@nisource.com" <pheystone@nisource.com>,  
Date: 03/07/2016 01:11 PM  
Subject: RE: Methane Challenge Excavation Damage Questions

---

Hello Paul,

Thank you for getting in touch. I just wanted to confirm that we received these questions and will get you a response as soon as possible, hopefully within the next few days. I hope that timing works?

Best,

Carey

---

Ms. Carey Bylin  
International Programs Leader, Oil and Gas  
Natural Gas STAR Program  
Global Methane Initiative  
U.S. Environmental Protection Agency  
Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)  
1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:  
Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460



**From:** pheystone@nisource.com [mailto:pheystone@nisource.com]  
**Sent:** Monday, March 07, 2016 12:11 PM  
**To:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Subject:** Methane Challenge Excavation Damage Questions

Hi Carey,

Hope you are doing well. Thanks for all your great work on the Methane Challenge program. Could you please provide additional detail on the following Excavation Damage BMPs?

1. Total number of excavation damages per class location

What is meant by "class location"?

2. Total number of excavation damages in which pipeline was shut-in

What is meant by "shut in" and also, is this referring to a pipeline that was shut in before, or as a result, of an excavation damage?

3. Total number of excavation damages on pipelines or facilities with supervisory control and data acquisition-based systems in place

What is meant by "facilities with supervisory control and data acquisition-based systems in place"?

4. Total number of excavation damages where the operator was given prior notification of excavation activity

Who is the "operator" - the external party that causes an excavation damage, or the LDC that owns the pipe?

Thank you for your help.

**Paul R. Heyborne**

Environmental Coordinator 3

NiSource, Environmental Policy

Office: (219) 647-5244

Cell: (219) 381-5723

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** tracy.gionfriddo@eversource.com  
**Sent:** Mon 3/7/2016 7:14:31 PM  
**Subject:** Re: Methane Challenge Information

Thank you, Carey.

Tracy A. Gionfriddo  
Senior Environmental Specialist

PLEASE NOTE my new email:  
tracy.gionfriddo@eversource.com

From: "Bylin, Carey" <Bylin.Carey@epa.gov>  
To: Tracy A. Gionfriddo/NUS@NU,  
Cc: "Pryor, Justin" <Pryor.Justin@epa.gov>  
Date: 03/07/2016 02:06 PM  
Subject: Methane Challenge Information

---

Hi Tracy,

Good to speak to you just now. Attached is the Word version of the MOU and also the launch fact sheet.

Information on how the Natural Gas STAR Program handles logo use can be found at <https://www3.epa.gov/gasstar/guidelines/beyond.html> (it's toward the bottom of the page). Note that we are still finalizing our Methane Challenge logo and will share it as soon as it's available.

We look forward to working with you on the Methane Challenge Program.

Best,

Carey

---

Ms. Carey Bylin  
International Programs Leader, Oil and Gas  
Natural Gas STAR Program  
Global Methane Initiative  
U.S. Environmental Protection Agency  
Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)  
1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:  
Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460

**To:** Fiji George[Fiji\_George@SWN.COM]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]; Franklin, Pamela[Franklin.Pamela@epa.gov]; Hargrove, Anne[Hargrove.Anne@epa.gov]  
**From:** Gunning, Paul  
**Sent:** Fri 3/4/2016 8:30:26 PM  
**Subject:** RE: Request for call

Fiji, good to hear from you. I would be happy to talk and I am looping in Pamela and Carey who have been working closely with Tom. Would this be with all of the members or just a subset? Please let me know what times might work

Paul

-----Original Message-----

From: Fiji George [mailto:Fiji\_George@SWN.COM]  
Sent: Friday, March 04, 2016 12:18 PM  
To: Gunning, Paul <Gunning.Paul@epa.gov>  
Subject: Request for call

Paul,

Hope all is well with you. Will you have a few minutes on Monday to discuss One Future/Methane Challenge sign up with a few members?

Thanks,

Fiji George  
Southwestern Energy

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**To:** Dickersbach, Melanie Carrow:(BSC)[Melanie.Dickersbach@exeloncorp.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Thur 2/25/2016 7:48:44 PM  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Good Morning Melanie,

We are very pleased to hear of your interest in joining the Methane Challenge Program.

In response to your questions, yes, you may join as a corporation if each of the utilities has already been a member of Gas STAR and reports separately under subpart W. The utilities may continue as Gas STAR members if they would like, we will just need to work out avoiding duplicative reporting of emissions reductions (this would not need to be worked out before signing up).

As far as joining as a corporation or as separate partners, you may take either approach, based on your preference. Are BGE and PECO the only subsidiary LDCs of Exelon?

With regard to your last question about making a modified commitment, we feel that partners would stay within the Tiered approach as laid out in the Program technical information document. It would be apparent through the transparent reporting process that the commitment put forward in the Partnership Agreement to reach the 3% replacement rate within three years would be achieved, but part of that commitment is to maintain at least that rate moving forward for the next five years. We understand that resource limitations may affect operations within 12 month periods, and we would certainly work with you if a commitment cannot be achieved, possibly through providing an explanation to accompany the data for that year to be transparent on the website.

Please let me know if you have any further questions, or if a call may be more beneficial to discuss specific points, I would be glad to set something up. Again, thank you for your interest and we look forward to working with you!

Respectfully,

Justin Pryor



Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Dickersbach, Melanie Carrow:(BSC) [mailto:Melanie.Dickersbach@exeloncorp.com]  
**Sent:** Thursday, February 25, 2016 10:58 AM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Subject:** FW: Natural Gas STAR Methane Challenge Program

Hi Justin –

I am with Exelon Corporation, the parent company of BGE and PECO, and we have been exploring different options for joining the Natural Gas STAR Methane Challenge Program.

- Could we join as a corporation if each of the utilities has already individually been a member of Natural Gas Star and reports separately under Part 98 Subpart W?
- If we joined as a corporation – would we pool the inventory of our owned utilities to determine our replacement rate tier, or would they need to each set different commitment levels based on their individual inventories of piping? Individually BGE and PECO would be Tier 3, but combined they would be Tier 2.
- Also, could a corporation make a similar type of commitment – but slightly modified – such that they replaced a certain percent by a certain date, thereby affording a bit more freedom to spread the work out over the years as they were able to get it done. (For example – target reaching a 3% replacement rate in three years and maintain that rate for an additional 2 years – but the formal commitment be to replace 12.5% over 5 years). There is always the potential for emergent work associated with damaged system lines or other redirection that could compete with a work plan in any given calendar year – and resource limitations could cause having to shuffle timing for projects between 12 month periods.

Thanks for your help with this. This looks like a great initiative and we would love to be able to participate if we can.

Sincerely,

Melanie Dickersbach

Climate and Environment Strategy Manager

2301 Market Street S23-3

Philadelphia, PA 19103

Office: 215.841.6371 | Cell: 215.316.8426

[melanie.dickersbach@exeloncorp.com](mailto:melanie.dickersbach@exeloncorp.com) [www.exeloncorp.com](http://www.exeloncorp.com)

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]  
**Sent:** Tuesday, February 23, 2016 11:29 AM  
**To:** King, Theresa S:(BGE)  
**Cc:** Bylin, Carey  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Good Morning Ms. King,

I am a colleague of Ms. Bylin, and can hopefully answer your questions. First off, we are excited to hear of your interest in the Program! And thank you for reaching out, as well.

The replacement rate commitment is something a partner would work towards over their 5 year commitment. If you were to sign up this March, for example, you would choose a commitment start date between the March and August/September (2016) timeframe. You would then have until August/September of 2021 to achieve and maintain moving forward at least a 3% annual replacement rate.

We have yet to work out all of the details regarding partners that do not meet their commitments, but we certainly plan to work with our partners in any way we can to assist in accomplishing their goals. I can say with confidence that we wouldn't highlight that a company did not achieve a commitment. I can discuss this further with my team and get back to you with more information, though.

Please let me know if you have any further questions, and again, we're excited to work with you!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** King, Theresa S:(BGE) [<mailto:Theresa.King@bge.com>]  
**Sent:** Tuesday, February 23, 2016 8:51 AM  
**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** Natural Gas STAR Methane Challenge Program

Hi Ms. Bylin,

I work for Baltimore Gas and Electric and we are looking into joining the Natural Gas STAR Methane Challenge Program.

We were looking at making a commitment for replacing cast iron and unprotected steel mains. When I look at the chart in the Technical Information document it looks like we would fall in Tier 3 which would require a 3% annual replacement. We are planning to meet that in 2016 but it is going to be close. Is the commitment for every year or over the next 5 years? And what happens if a partner does not meet their commitment?

Thanks,

Theresa

***Theresa S. King***

*BGE Environmental Management Unit*

Sr. Environmental Scientist

phone 410.470.6436 | fax 410.213.3382

email: [Theresa.King@bge.com](mailto:Theresa.King@bge.com)

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**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Brad.Morello@Shell.com  
**Sent:** Thur 2/25/2016 5:08:33 PM  
**Subject:** Methane Challenge (Shell)

Hello Carey,

Hope all is well and imagine you guys are very busy these days.

If you have some time in the near future would like to discuss the Methane Challenge. My mobile number is [Ex. 6 - Personal Privacy]

Thank you,

Brad

Brad Morello  
Science & Policy Advisor – Air

Shell Exploration & Production Company

150 North Dairy Ashford, A456-G

Houston, Texas 77079

Tel: + 1.832.337.6347

Email: [brad.morello@shell.com](mailto:brad.morello@shell.com)

**To:** theresa.king@bge.com[theresa.king@bge.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Tue 2/23/2016 4:29:09 PM  
**Subject:** RE: Natural Gas STAR Methane Challenge Program

Good Morning Ms. King,

I am a colleague of Ms. Bylin, and can hopefully answer your questions. First off, we are excited to hear of your interest in the Program! And thank you for reaching out, as well.

The replacement rate commitment is something a partner would work towards over their 5 year commitment. If you were to sign up this March, for example, you would choose a commitment start date between the March and August/September (2016) timeframe. You would then have until August/September of 2021 to achieve and maintain moving forward at least a 3% annual replacement rate.

We have yet to work out all of the details regarding partners that do not meet their commitments, but we certainly plan to work with our partners in any way we can to assist in accomplishing their goals. I can say with confidence that we wouldn't highlight that a company did not achieve a commitment. I can discuss this further with my team and get back to you with more information, though.

Please let me know if you have any further questions, and again, we're excited to work with you!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** King, Theresa S:(BGE) [<mailto:Theresa.King@bge.com>]  
**Sent:** Tuesday, February 23, 2016 8:51 AM  
**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** Natural Gas STAR Methane Challenge Program

Hi Ms. Bylin,

I work for Baltimore Gas and Electric and we are looking into joining the Natural Gas STAR Methane Challenge Program.

We were looking at making a commitment for replacing cast iron and unprotected steel mains. When I look at the chart in the Technical Information document it looks like we would fall in Tier 3 which would require a 3% annual replacement. We are planning to meet that in 2016 but it is going to be close. Is the commitment for every year or over the next 5 years? And what happens if a partner does not meet their commitment?

Thanks,

Theresa

***Theresa S. King***

*BGE Environmental Management Unit*

Sr. Environmental Scientist

phone 410.470.6436 | fax 410.213.3382



**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** chris.kapp@hoerbiger.com  
**Sent:** Mon 9/21/2015 2:08:23 AM  
**Subject:** Deadline Extended for Feedback on the Natural Gas STAR Methane Challenge Proposal

Hi Carey

As an interested party HOERBIGER would like to comment on the documents below before your deadline October 13:

Draft Memorandum of Understanding (MOU)  
Draft Implementation Plan Template  
Draft Technical Specifications for BMP Commitment Options

I checked out the EPA methane challenge web site and the links for the documents are not active. Could you either send me the documents by email or check the links and activate them please ?

Thank-you !

*Regards/mfg,  
Chris Kapp, Sr. VP  
Global Head Compression Technology Systems  
HOERBIGER KT*

  
**HOERBIGER**  
1212 Milby Street  
Houston, Texas • 77023  
Cell (281) 569-9696  
[info-americas@hoerbiger.com](mailto:info-americas@hoerbiger.com)  
[www.hoerbiger.com](http://www.hoerbiger.com)

**To:** Brian Jones[bjones@mjbradley.com]  
**Cc:** Franklin, Pamela[Franklin.Pamela@epa.gov]; Bylin, Carey[Bylin.Carey@epa.gov]; Waltzer, Suzanne[Waltzer.Suzanne@epa.gov]; Irving, Bill[Irving.Bill@epa.gov]  
**From:** Gunning, Paul  
**Sent:** Fri 9/18/2015 7:22:56 PM  
**Subject:** RE: Downstream Initiative Meeting - October 22

Brian,

Great to hear from you and thanks for the invite. Yes, we would be happy to participate. Let me talk to folks internally and get back to you with some suggestions early next week. Hope that works and thanks for reaching out.

Paul

**From:** Brian Jones [mailto:bjones@mjbradley.com]  
**Sent:** Thursday, September 17, 2015 5:17 PM  
**To:** Gunning, Paul  
**Cc:** Franklin, Pamela; Bylin, Carey; Waltzer, Suzanne  
**Subject:** Downstream Initiative Meeting - October 22

Hi Paul,

I hope you are doing well.

The fall meeting of the Downstream Natural Gas Initiative is scheduled for October 22 in Washington DC. I am pulling together the agenda now and hope EPA will be able to join us.

Topics areas of interest to DSI include the following:

- Methane strategy update
- Methane Challenge Program
- National GHG Inventory

Please let me know any thoughts you may have on the topic areas, attendees and timing.

Thanks,

Brian

\*\*\*\*\*

Brian M. Jones

Senior Vice President, Strategy and Policy

M.J. Bradley & Associates, LLC.

47 Junction Square Drive

Concord, MA 01742

Direct: (978) 405-1269

Mobile: Ex. 6 - Personal Privacy

Fax: (978) 369-7712

Email: [bjones@mjb Bradley.com](mailto:bjones@mjb Bradley.com)

Web: [www.mjbradley.com](http://www.mjbradley.com)

\*\*\*\*\*

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**To:** methanechallenge@tetrattech.com[methanechallenge@tetrattech.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Tom Michels  
**Sent:** Fri 12/11/2015 11:20:21 PM  
**Subject:** ONE Future Coalition Feedback on the Draft Supplementary Technical Information for the ONE Future Commitment Option  
ONE Future Coalition Comments on EPA Draft Supplementary Technical Information.pdf

Attached are the comments of the ONE Future Coalition on the Draft Supplementary Technical Information for the ONE Future Commitment Option.

Please contact me with any questions. Thanks!

Tom Michels

Executive Director,

**ONE Future Coalition**

[www.onefuture.us](http://www.onefuture.us)

Principal,

**BlueWater Strategies llc**

25 Massachusetts Avenue, NW

Suite 820

Washington, DC 20001

[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)

Direct – 202-589-1759

Office – 202-589-0015

Mobile –202-413-2059

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Tom Michels,  
Executive Director  
Our Nation's Energy Future Coalition, Inc.  
25 Massachusetts Avenue, NW  
Suite 820  
Washington D.C., 20001

December 11, 2015

Carey Bylin  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW (6207-J)  
Washington, DC 20460

*Via e-mail: methanechallenge@tetrattech.com*

**RE: The U.S. Environmental Protection Agency's Proposed Natural Gas STAR Methane Challenge Program: Supplementary Technical Information for ONE Future Commitment Option.**

Dear Ms. Bylin:

Our Nation's Energy Future Coalition, Inc. (ONE Future) appreciates the opportunity to comment on the U.S. Environmental Protection Agency's (EPA) Proposed Natural Gas STAR Methane Challenge Program's Supplementary Technical Information for ONE Future Commitment Option (STI) released on November 24, 2015.

ONE Future is a unique coalition of leading companies with operations in one or more of the following four principal segments of the natural gas industry: (1) oil and natural gas production and gathering; (2) natural gas processing; (3) natural gas transmission and storage; and (4) natural gas distribution. ONE Future is a non-profit 501(c)(6) trade group that is focused exclusively on improving the management of methane emissions from the wellhead to the burner tip. By bringing together companies from every segment of the natural gas value chain, we aim to deploy innovative solutions to operational and policy challenges that will deliver better results to our customers, increase value to our shareholders, and improve the environment.

We have reviewed the Agency's draft STI, and in general, find the direction of the proposal to be a substantial deviation from the ONE Future framework as it has been discussed with EPA. Moreover, the proposal appears to require the gathering of significant volumes of superfluous data that does nothing to contribute to improved emissions performance, with an associated expense that would serve as a deterrent to participation in the ONE Future framework. Our more substantive comments follow, but given the elements of EPA's proposal that conflict with the ONE Future framework, we believe that it would be beneficial for the Agency to hold a stakeholder workshop, in an attempt to arrive at a better

common understanding of how the Methane Challenge can accommodate both the Best Management Practices approach and the ONE Future approach.

ONE Future has recently provided detailed comments to the EPA on its Proposed Framework for the Natural Gas STAR Methane Challenge Program (Proposed Framework) issued on July 23, 2015, as well as the Supplementary Technical Information released on October 19, 2015, and the Draft Partnership Agreement and Draft Implementation Plan Guidelines released on November 10, 2015. We have elected to re-submit those comments to the Proposed Framework in their entirety, as our recommendations were not incorporated into the STI.

As we stated in our recent comments to the EPA's Proposed Framework for the Natural Gas STAR Methane Challenge Program, ONE Future appreciates EPA's proposal to establish an official linkage between ONE Future and the Methane Challenge program. We strongly believe that in supporting ONE Future as a Methane Challenge commitment option, EPA facilitate an approach that can achieve significant methane reductions at the lowest cost to industry and consumers. EPA's support could ensure that emission performance will be uniformly tracked and reported in public to assure transparency and credibility, while facilitating performance benchmarking.

However, insofar as the EPA proposes in the STI that participants will report extensive data and information extraneous to EPA's program mission, we believe that such a reporting effort will detract from that mission and deter industry participation in the Methane Challenge program. For that reason, ONE Future strongly opposes certain elements of the EPA's draft STI which we believe will run counter to the mission of the ONE Future Coalition and the Methane Challenge program.

Specifically, ONE Future urges the EPA to consider the following changes to the draft STI:

1. **Eliminate any requests to report supplemental data and information below the facility level.**

Such requests would include component-level emissions or the specific equipment changes or work practices that were deployed at a given facility. As we stated in our comments to the Proposed

Industry Segment	Reporting Facility
<b>Production &amp; Gathering</b>	Consistent with Subpart W
<b>Processing</b>	Consistent with proposed Subpart W
<b>Transmission &amp; Storage</b>	Reported at each Pipeline level <sup>1</sup>
<b>Distribution</b>	Consistent with Subpart W <sup>2</sup>

Framework, ONE Future member companies will report their emissions to EPA via the Methane Challenge reporting platform in order to demonstrate progress toward our emission intensity commitments. Under the ONE Future program, net emissions and emission intensities will be computed from emissions estimated and aggregated at the levels indicated in the table at left

<sup>1</sup> The reporting level for ONE Future's Transmission and Storage industry segment would be at the Business Unit level, or alternately would include the aggregate of the covered emission sources included in the following facility definitions listed in Appendix C of the Methane Challenge Supplementary Technical Information: "Natural Gas Transmission Compression & Underground Natural Gas Storage" and "Onshore Natural Gas Transmission Pipeline".

<sup>2</sup> ONE Future is supportive of the clarifying changes to this reporting classification requested by the American Gas Association in its comments to the Proposed OOOOa Rule.

for all covered emission sources. This reporting structure is consistent with the EPA's Greenhouse Gas Reporting Program, and will enable both the EPA and the public to track progress toward our commitments on a year-over-year basis.

2. **Eliminate any requests that program partners classify emission abatement actions as “voluntary” or “mandatory”.** Once again, ONE Future is a goal-oriented program that has specified an ambitious, specific and measurable performance target. Whether a company achieves its target by means of deploying voluntary or mandatory measures is immaterial. Likewise, it is immaterial whether a company was already operating at or near its targeted level of performance upon entering the Methane Challenge program. Upon entering Methane Challenge and choosing the ONE Future Commitment Option, all companies will report their emissions in exhaustive detail far above and beyond what is required of companies under existing law or under the Methane Challenge BMP Commitment Option. As noted throughout our comments on EPA's Proposed Framework, the ONE Future approach was built around identifying a robust, scientifically-determined performance target that is consistent with optimal performance. Even in the unlikely event that a company was to achieve and sustain such a level of performance exclusively by adhering to state and federal mandates, the outcome is what is important: optimal performance.

Further, it should be noted that although the Administration has always communicated that a combination of mandatory and voluntary measures would contribute toward achieving its stated goal of 40-45% reduction in methane emissions from 2012 levels, neither the Administration nor the EPA has chosen to delineate specific targets to the voluntary and mandatory components of their plans. In light of this, we are at a loss to see why it would be incumbent upon industry to differentiate between the two.

Therefore ONE Future opposes those elements of EPA's proposal that would require companies to classify actions taken as being compliance-related or wholly voluntary, as gathering this information is extraneous, and will lead to unnecessary expenditures that are neither reasonable nor practical.

3. **As stated in our comments to the Proposed Framework, ONE Future urges the EPA to issue Methane Challenge program guidance that recognizes and accounts for the reduction potential of fugitive emissions abatement practices such as Leak Detection and Repair (LDAR) and Directed Inspection and Maintenance (DI&M).** These programs have been demonstrated to be effective in reducing equipment leaks and fugitive methane emissions, however the GHGRP does not account for any reductions achieved via the application of these work practice standards. EPA has indicated that they will recognize reductions related to these programs but has proposed to await finalization of EPA's proposed standards of performance for emissions of methane and volatile organic compounds (VOCs) from new, modified and reconstructed sources



in the oil and gas sector<sup>3</sup> *before* specifying abatement options (or defining emission factors for such options) for fugitive emissions and equipment leaks.

ONE Future opposes such a delay as we believe that there is no reason to link pending regulatory requirements governing fugitives from new sources with voluntary actions on both new and existing sources. To the contrary, one of the key features of a voluntary program is the fact that it can accommodate and encourage the deployment of innovative and customized approaches to emissions abatement. We encourage the EPA not to wait for finalization of the proposed OOOOa to arrive at appropriate reduction estimates for companies utilizing these work practice standards; rather we urge EPA to provide a clear methodology that allows companies to quantify their reductions by implementation of these voluntary practices.

- 4. Finally, we urge EPA to revise the data elements requested under the heading of “Emission Sources” in the STI to be consistent with those delineated in the Emissions Reporting Appendix of ONE Future’s Comments to the Proposed Framework.**

Thank you for your consideration of these comments. Should you have any questions, please contact me directly.

Tom Michels  
Executive Director,  
ONE Future Coalition

---

<sup>3</sup> Oil and Natural Gas Sector: Emission Standards for New and Modified Sources, 80 Fed. Reg. 56,593 (Sep. 18, 2015) (“Proposed OOOOa Rule” or “Proposed Rule”).

**To:** methanechallenge@tetrattech.com[methanechallenge@tetrattech.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Brian Jones  
**Sent:** Sat 11/14/2015 3:26:26 AM  
**Subject:** DSI Feedback - Methane Challenge Program Proposal  
DSI Methane Challenge Feedback Letter.pdf

The attached letter provides the Downstream Natural Gas Initiative (DSI) feedback on the Natural Gas STAR Methane Challenge Program Proposal and Supplementary Technical Information document.

We look forward to continued engagement on this topic.

Thank you,

Brian

---

Brian M. Jones

Senior Vice President

M.J. Bradley & Associates, LLC

47 Junction Square Drive

Concord, MA 01742

Main: 978-369-5533 | Direct: 978-405-1269

[www.mjbradley.com](http://www.mjbradley.com)



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November 13, 2015

Ms. Carey Bylin  
Natural Gas STAR Program  
U.S. EPA  
1201 Constitution Ave NW  
Washington DC 20004

**RE: Feedback on EPA's Natural Gas STAR Methane Challenge Program Proposal**

Dear Ms. Bylin,

On behalf of the Downstream Natural Gas Initiative (DSI), we appreciate the opportunity to provide feedback on the Natural Gas STAR Methane Challenge Program Proposal and Supplementary Technical Information document. This letter provides feedback on the proposed BMP Option, including source descriptions, mitigation options, and proposed GHGRP and voluntary reporting data elements. Current Downstream Initiative members include Consolidated Edison Company of New York, Inc., National Grid, Pacific Gas & Electric, Public Service Electric & Gas, Southern California Gas Company, and Xcel Energy. Our feedback below provides our comments and recommendations and we look forward to continued engagement on this topic.

**Overview**

DSI members support the goal identified by EPA for the Methane Challenge Program - to recognize leading companies that make commitments to increased action to reduce methane emissions from their operations. DSI members are committed to taking a leadership role to substantially reduce methane emissions to contribute to the Obama Administration's 2025 methane reduction goals.

Public recognition through the Methane Challenge Program will help support the efforts of local distribution companies (LDCs) to communicate the value of operational excellence and methane emission reductions to regulators, consumer advocates, customers, and environmental organizations.

EPA should also consider ways to provide public recognition for states and public utility commissions (PUCs) that provide the necessary regulatory structures that enable increased action to reduce methane emissions from LDC operations. The Obama Administration, including EPA, DOE, and other federal agencies, should support Methane Challenge Program partners at the state level through engagement with state regulators and other stakeholders to voice support for investments in best management practices (BMP) and methane emission reductions.

**Voluntary and Regulatory Actions**

Methane Challenge Program partner commitments that are above and beyond current infrastructure modernization and replacement plans are dependent on obtaining additional approval from state regulators. The challenge for LDCs is to obtain cost recovery for "voluntary activities", which may be incorrectly interpreted by some stakeholders as being paid for using shareholder dollars without recovery. A LDC is not fulfilling its duty and obligation to its shareholders if it makes investments that do not earn a rate of return. Therefore, in order for LDCs to make additional investments to

accelerate the pace of methane emission reductions, supporting state regulatory structures and cost recovery mechanisms are critical.

In addition, some LDCs may be required to reduce methane emissions from their operations, through the adoption of BMPs, as a component of state climate change goals and programs. For example the California Legislature passed SB 1371 in 2014, which seeks to reduce methane emissions from leaks in the gas transmission, distribution and storage utilities in California. In January 2015, the California PUC launched Rulemaking (R.) 15-01-008 in response to SB 1371 to establish and require the use of BMPs for leak surveys, patrols, leak survey technology, leak prevention, and leak reduction. It is likely that the Methane Challenge Program proposed BMPs will overlap with the BMPs identified by the California PUC. As such, EPA should work with LDC Methane Challenge Program partners to address how LDCs may receive recognition for these actions under the program.

### **BMP Commitment Option**

DSI members support EPA's BMP commitment option. One of the main benefits of this option is the flexibility it provides potential program partners to choose which sources they will address. DSI companies are committed to working with EPA to continue to develop the technical requirements for the BMP commitment option for the natural gas distribution segment. In addition, DSI members encourage EPA to consider adding BMP sources and measures over time as outlined below.

DSI members support EPA's approach to maintain consistency between the technical details and reporting elements associated with the BMPs between the BMP and ONE Future Emissions Intensity Commitment Options. As you are aware, one of the founding members of DSI, National Grid, is also a member of ONE Future.

DSI members support the approach outlined by EPA to become a Methane Challenge Program partner –entering into a memorandum of understanding (MOU) with EPA documenting commitments and reporting. We also support the development of an Implementation Plan to detail anticipated rate of progress, key milestones, and context for partner implementation plans within six months of joining the Methane Challenge Program.

Furthermore, DSI members support the proposed level at which LDCs would make commitments under the Methane Challenge Program BMP Option - a LDC as regulated by a single state public utility commission. This proposed level is consistent with the Subpart W facility definition and how companies manage their infrastructure assets.

The 5-year BMP implementation time line proposed by EPA is appropriate in most cases. This timeframe will allow companies time to gather and analyze data, evaluate and develop mitigation approaches, engage stakeholders and secure approval from PUCs for rate recovery and implement the BMP.

DSI members support EPA's commitment to transparency for the Methane Challenge Program. It is important that partners report on their voluntary mitigation actions that contribute to their commitments through a public platform managed by EPA. In addition, for companies that go further than the BMP minimum requirements, they should receive additional public recognition from EPA.

DSI supports leveraging Subpart W reporting as much as possible to minimize administrative burdens and costs. DSI also agrees with the need for supplemental data reporting in order to capture Methane Challenge Partner activities that reduce methane emissions but that will not be reflected in Subpart W methane emission trends. The e-GGRT system would be an appropriate mechanism to collect voluntary supplemental data.

In order to provide stakeholders with an accurate and transparent view of Methane Challenge Partner's efforts to reduce methane emissions, the supplemental data should be summarized and presented with the same public visibility as the Subpart W reporting. In addition, within Subpart W emission summaries released by EPA every September, DSI recommends that EPA clearly identify Methane Challenge Partners to acknowledge their participation and communicate that the Partner reports supplemental data to EPA.

### ***M&R Stations City Gates***

DSI members agree with EPA's proposed approach on M&R stations. The recently published Washington State University (WSU) study concluded that emissions from M&R stations are low. According to WSU leak surveys at 229 M&R stations, no leaks were detected in 30 percent of the sites. This can largely be attributed to equipment replacements/facility rebuilds, improved leak surveys, and modern station designs.

In fact, survey results from five LDCs for 90 sites showed approximately 60 percent of these facilities had undergone some level of equipment change since 1992. Equipment changes were in three key areas: 1.) conversion of pneumatics from high bleed to low or no bleed using instrument air; 2) change from relief valves for over pressure protection to the use of closed systems that have two regulators in series (a monitor regulator and an operating regulator); and 3) a move from orifice metering to rotary, turbine and ultrasonic metering. Partners that have upgraded M&R stations and reduced methane emissions should be recognized by EPA through the Methane Challenge Program as outlined below.

In addition, since 2011 data year reporting under Subpart W of the GHGRP, LDCs have conducted leak detection surveys at above ground stations on an individual component basis. Since T&D station surveys for some LDCs are a large undertaking, EPA allowed LDCs to spread out the leak detection surveys over a 5-year period. LDCs are required to survey an equal number of stations across the five year period, without monitoring the same station twice. Minimal leaks are found and are usually thread-related. Typically when leaks are found during these surveys, they are repaired.

While the majority of M&R stations have been upgraded and modern station design is lower emitting, there may be M&R stations that remain to be upgraded especially at smaller LDCs that are not currently subject to Subpart W reporting. Therefore, EPA should include M&R stations as a BMP source in the Methane Challenge Program. The approach EPA could use for this BMP option may consist of: conversion of pneumatics from high bleed to low or no bleed and annual leak surveys and emissions reporting similar to Subpart W.

### ***Mains – Cast Iron, Unprotected Steel***

DSI members support the approach EPA has proposed with this BMP option: replace cast iron mains with plastic or cathodically protected steel and replace or cathodically protect unprotected steel mains, or rehabilitate cast iron and unprotected steel pipes with plastic pipe inserts, also referred to as slip-lining or u-liners, or cured-in-place liners. This approach provides LDCs with flexibility to implement the strategies most appropriate for their given infrastructure make up, cost effectiveness and other factors.

DSI members support the proposed adjustments to the minimum annual replacement/rehabilitation rates contained in the American Gas Association's comments. These revised minimum replacement/rehabilitation rates are reasonable given the barriers LDCs face implementing these programs including; cost and ratepayer impacts, uncertainty of cost recovery, adequacy of skilled labor, community disruptions and public objections.

Furthermore, DSI members agree that EPA should use the LDC partner's main inventory as of January 1 of the year the LDC joins the Methane Challenge Program to determine the applicable Tier for the first 5-year implementation period. EPA should also clarify the program requirements when a LDC reduces its cast iron and unprotected steel main inventory resulting in a change to the applicable Tier and subsequent increase in the minimum replacement/rehabilitation rate. In these cases, the LDC partner should be allowed to commit to the new Tier for the next 5-year implementation period.

LDCs that achieve a higher replacement rate than the minimum should receive additional recognition from EPA. LDCs that currently replace mains at a faster rate than the minimum proposed by EPA should also receive EPA recognition and could commit to maintaining that rate or increasing it in the future.

DSI members support the inclusion of lining and inserts in this BMP. Pipeline lining can be a cost effective strategy on a project specific basis where access to the main is difficult including railroad, highway, bridge and river crossings. Studies have shown that lining is just as effective as replacement from a safety perspective and longevity perspective. Cornell University has studied the longevity of lining cast iron pipe and has found over a 100 year lifetime.

DSI members encourage EPA to include internal and external joint sealing for cast iron mains larger than 20 inches in diameter that logistically cannot be replaced. While we understand that EPA prefers lining because this option not only reinforces the joint but also the entire pipe, pipes of this size have thick walls and do not break other than due to excavation damages. These larger mains are buried deep underground (sometimes at depth greater than 20-30 feet), under major highways, cities, and other areas which present considerable financial and logistical barriers to replacement.

In most cases, joint sealing is the only viable and cost effective option to repair leaks which occur primarily at the joints. In addition, lining of pipes of this diameter and larger are cost prohibitive, require the main to be taken out of service for multiple days resulting in customer impacts and additional costs and complexity. Internal (CISBOT) and external cast iron joint sealing has been proven by several DSI members as a cost effective approach. CISBOT allows the repair to be completed without taking the main out of service, reducing customer impacts and overall costs. Cost savings associated with CISBOT are on the order of 50 percent compared with conventional point repair. Tests by Cornell University (for the New York Gas Group) and British Gas prove a 50 years minimum life expectancy for cast iron joint encapsulation, the most common external sealing method used.

DSI also suggests that EPA and other federal agencies work with Methane Challenge Partners on the appropriate emission factor for sealing (internal and external) and joint encapsulation for cast iron mains.

DSI members support the reporting elements for this BMP as outlined by EPA in the Supplemental Technical Information document. LDCs that utilize lining and insert strategies will now be able to create a public record of the total miles of cast iron or unprotected steel distribution mains that have plastic liners or inserts. DSI members support the use of the plastic emission factor for lining and inserts. While emission factor research has not been conducted in this area, this proposed approach seems reasonable. Historically, LDCs that implement lining or plastic insert strategies to address leak prone pipe have not been publicly recognized for these efforts. While main and service replacement is the preferred approach, lining and inserts are used in circumstances where replacement is cost prohibitive or too disruptive to the public. By using the plastic main and services emission factors, LDCs will now be able to account for the leak reduction benefit of these strategies.

### ***Services– Cast Iron, Unprotected Steel***

DSI members support the approach EPA has proposed with this BMP option: replace unprotected steel and cast iron services with copper, plastic, or protected steel, or rehabilitate cast iron and unprotected steel services with plastic pipe inserts. Similar to mains, DSI members support the inclusion of lining for this BMP.

DSI members recommend EPA structure this BMP as follows: at a minimum LDCs commit to replace or rehabilitate the associated unprotected steel and cast iron services when the main is replaced or rehabilitated. In addition, LDCs with dedicated programs to replace/rehabilitate unprotected steel and cast iron services should be recognized by EPA under this BMP.

DSI members also support the reporting elements for this BMP as outlined by EPA in the Supplemental Technical Information document.

### ***High Pressure Pipe Blowdown***

DSI members support the mitigation approaches EPA has proposed with this BMP option: route gas to a compressor or capture system for beneficial use; route gas to a flare; route gas to a low-pressure system; reduce system pressure prior to maintenance; installing temporary connections between high and low pressure systems; utilize hot tapping to avoid the need to blow down gas.

These mitigation options provide LDCs with the ability to implement a suite of strategies that are most appropriate and cost effective per project to reduce methane emissions associated with blowdowns or “operational natural gas releases”. Operators conduct operational releases for a variety of reasons including: maintenance activities, main replacement, emergencies and safety driven regulatory requirements – Maximum Allowable Operating Pressure (MAOP). In fact, DSI members anticipate an increase in the need to conduct operational releases in the near to medium term based on regulatory requirements. LDC systems are unique as are the maintenance and main replacement and rehabilitation activities which drive operational releases. Mitigating operational releases is good practice for a number of reasons including, safety, nuisance/odor issues, and methane emissions avoidance.

DSI members support EPA’s focus on blowdowns of pipelines operating above 60 psi. However, the language in the Supplementary Technical Information document states “pipelines operating at 60 psi or more”. We recommend that EPA clarify this language and focus on operational releases above 60 psi. From a cost effectiveness perspective, operational releases from high pressure mains are the most appropriate to focus on mitigating in the near term. We also agree with EPA that this BMP should not be applicable to emergency situations.

DSI members agree with the approach proposed by EPA to reduce methane emissions by 50 percent from total potential emissions each year within a 5 year period. For most LDCs, this will be a significant undertaking. LDCs will have to integrate new data collection and standard operating procedures into the maintenance and pipeline replacement process. LDC engineering departments will need to identify candidate projects, identify the preferred mitigation options considering local circumstances and costs, and coordinate with other projects in order to have the necessary equipment and skilled labor. In addition, these changes are likely to require utility commission approval for cost recovery, especially for the purchase of mobile compressors if used as one of the mitigation strategies. LDCs who demonstrate success with this BMP should be encouraged to develop stretch goals in the future.

EPA should permit LDCs the flexibility to identify a pathway to BMP implementation over a 5 year implementation horizon. First, LDCs do not routinely track operational releases below certain required thresholds. Second, LDCs will need to obtain regulatory approval and cost recovery from regulators. Third, it will take time to purchase portable compressors, train staff, and develop and implement procedures to integrate the technology into standard operating procedures. A pathway to BMP implementation could consist of the following steps:

- Year 1-2 Tracking, Data Collection and Reporting
- Year 3 Data Evaluation, Strategy Development and PUC Approval
- Year 4-5 Phased Implementation and Continued Tracking, Data Collection and Reporting

As outlined in the Supplementary Technical Information document, the total potential emissions would consist of calculated emissions from all planned maintenance activities in a calendar year assuming the pipeline is mechanically evacuated or mechanically displaced using non-hazardous means down to atmospheric pressure and no mitigation is used. DSI members agree with this approach and agree with EPA that potential emissions would vary from year to year. Subpart W calculation Method 1 or 2 are appropriate to use to estimate potential annual methane emissions. However, method 1, based on the volume of the pipeline segment between isolation valves and the pressure and temperature of the gas within the pipeline, will likely be the dominant method used by LDCs.

DSI members support the reporting elements for this BMP as outlined by EPA in the Supplemental Technical Information document. LDC partners would report the annual number of planned blowdowns and potential emissions per year. In addition, LDCs would report the mitigation approaches utilized and resulting emission reductions. EPA should consider the use of pressure control fittings as a mitigation option to reduce blowdown volumes rather than the use of existing valves. This data will provide a transparent accounting of the progress made by LDC partners implementing this BMP. Finally, EPA should provide quantification guidance for the use of flares in order to maintain consistency between LDCs.

### ***Excavation Damages***

DSI members support the mitigation approaches EPA has proposed with this BMP option: to shorten average time to shut-in for all damages, reduce the number of damages per thousand locate calls, undertake targeted programs to reduce excavation damages, and conduct incident analyses to inform process improvements and reduce excavation damages. While methane emissions associated with damages are uncertain and difficult to quantify, making progress in this area will improve safety, save money and result in methane emission reductions.

EPA should focus on all damages on the LDC system regardless of pressure. The number of damages is relatively even between services and distribution mains although the volume of methane that is emitted from service damages is very small. According to PHMSA data, excavation damages account for approximately 12 percent of all leaks from mains and 16 percent of all leaks from services. However, excavation damages account for over one third of all hazardous leaks from mains and one third of all hazardous leaks from services. For some DSI members, these values are much greater.

DSI members do not believe that quantifying methane emissions associated with excavation damages or setting emission reduction targets is appropriate for this source. Setting an emission reduction target for this BMP would be challenging due to the fact that emissions quantification is difficult due to the varying level of damages to mains and services. While LDCs do estimate the quantity of gas lost



from significant excavation damages for billing purposes, quantifying methane emissions reliably from all damages would be a challenge. Quantifying emissions associated with damages would require the development of a standardized methodology and would likely involve considerable uncertainty. Other targets, including reducing the number of damages, reducing average shut-in time for all damages, or other qualitative targets are in line with what LDCs are already doing which will result in greater participation from LDCs.

Reducing excavation damages is a priority for LDCs. LDCs use a variety of strategies to educate customers, contractors, and the general public on excavation safety. For example, the Gold Shovel Standard Program of PG&E is designed to enhance safe excavation practices in the field and to reduce dig-ins and damage-inducing activities. In order to contract with PG&E, companies must be Gold Shovel Standard certified. LDCs are also working to get response times shorter and shorter. One issue EPA should be aware of is the impact that LDC service territory geographic size, geography, and makeup (i.e., rural versus urban) has on shut-in time. In addition, several DSI members have hit a plateau based on location of service centers and number of crews available.

EPA should allow each individual LDC to develop and implement a commitment unique to their own company given the differences between service territories and the fact that damages to their systems are largely outside their control. Similar to blowdowns, EPA should permit LDCs the flexibility to identify a pathway to BMP implementation over a 5 year implementation horizon beginning with recordkeeping and reporting and establishing a baseline for average time to shut-in for all damages and the number of damages per thousand locate calls.

DSI members support the reporting elements for this BMP as outlined by EPA in the Supplemental Technical Information document. However, as indicated above, we do not believe that quantifying methane emissions associated with excavation damages or setting emission reduction targets is appropriate for this source. Therefore, the data elements regarding the estimated volume of methane released, methane emission reduction goals, progress towards those goals and emission reductions from voluntary efforts would not be applicable. These data elements include the following: approximate size of mechanical puncture, estimated volume of methane released (mt CH<sub>4</sub>), total estimate of natural gas released in a calendar year, company-specific goal for reducing methane emissions, progress in meeting company-specific goal, and emission reductions from voluntary action (mt CH<sub>4</sub>).

## **BMPs- Areas of Future Focus**

### *Mains and Services - Vintage and Century Plastic*

DSI members agree with EPA's decision not to include vintage or Century plastic in the mains or services BMP at this time. Most LDCs do not have sufficient available inventory data such that they can commit to and track replacement levels. Furthermore, emission factors do not exist for these main or service material types. In fact, plastic is not differentiated between plastic types at all with the current emission factors. Therefore, when LDCs replace vintage or Century plastic mains and services, this is not currently reflected in Subpart W reporting.

DSI members propose that EPA work with LDCs and other stakeholders to add vintage and century plastic as a BMP option in the future. This will require improved understanding of the main and services inventory as well as methane emissions from leaks and cracks in this material. As part of the Methane Challenge Program, EPA should establish a group of LDCs and other interested stakeholders to address these issues. We suggest that EPA engage stakeholders in AGA's Plastic Pipe Data Collection Initiative. Their goal has been to create a national database of information related to the in-service performance of plastic piping materials. Members include AGA, the American Public Gas

Association, the Plastics Pipe Institute, NARUC, the National Association of Pipeline Safety Representatives, and PHMSA.

#### *Customer Meters*

As LDCs replace and rehabilitate leak prone pipe and modernize facilities, EPA should consider adding other BMP sources to the Methane Challenge Program. For example, for some LDCs, customer meters are estimated to be one of the most significant sources of methane emissions. As such, EPA should work with LDCs and other stakeholders to evaluate the development of a BMP focused on customer meters. The mitigation options for this BMP could include the repair or replacement of a specified percentage of customer meters annually.

#### *Leak Backlogs*

Many LDCs have a backlog of nonhazardous leaks on their systems. These leaks are typically classified as Grade 3 leaks and reported to PHMSA. LDCs are using increasingly more sophisticated leak detection equipment and are collaborating with NYSEARCH to quantify methane emissions from leaks. EPA should work with LDCs and other stakeholders to evaluate the development of a BMP focused on reduction of leak backlogs and the repair of leaks. The mitigation options for this BMP could include the repair of a specified percentage of leaks annually based on the size of the leak backlog. In addition, this BMP could also include increased surveys, emissions quantification of leaks found and repaired.

#### *Methane Emissions Quantification*

The current methane emissions quantification methodology for LDCs consists of default methane emission factors per mile of main and number of services. While the WSU research represents an improvement to the default emission factors currently used by EPA in the Greenhouse Gas Inventory and Subpart W, a transition to leak based emission factors should be considered. This alternative approach will more accurately reflect the efforts by LDCs to find and fix leaks by creating a public record of reduced methane emissions. Under the currently methodology, even LDCs who eliminate all leaks from their gas distribution networks would be unable to demonstrate methane emission reductions for best in class performance. EPA should work with LDCs and other stakeholders to evaluate the development of an alternative methodology to quantify emissions and emission reductions.

#### **Sunset Dates for Mitigation Options**

Similar to Natural Gas STAR, it is reasonable for the Methane Challenge Program to create a structure to establish sunset dates for mitigation options. DSI members recommend that EPA maintain consistency between the Natural Gas STAR program and Methane Challenge as much as possible. As EPA notes in the Supplemental Technical document, liners have a 10 year emission reduction benefit lifetime in the Natural Gas STAR program. This emission reduction benefit lifetime could also be applied to inserts and internal and external joint sealing under the Methane Challenge Program.

#### **Recognizing Historic Action**

The Methane Challenge Program should recognize previous actions by LDC partners for one or more BMP sources. This would likely be attractive to partners that have undertaken mitigation efforts to address a source identified by EPA (such as M&R stations) but is not selecting that BMP as part of its implementation plan. Background data and information on a partner's mitigation efforts and recognition by EPA would improve transparency and inform stakeholders as the program is launched. EPA could acknowledge these actions within the implementation plan of the LDC along with fact sheets and other materials prepared for the launch of the program in early 2016.

EPA should develop a standardized list of data elements and qualitative information that LDC partners would be required to provide regarding the actions taken and an estimate of the methane emission reduction benefits achieved. However, EPA should avoid making the data required a burden to Methane Challenge Program partners which could result in LDCs forgoing this opportunity. Finally, EPA may want to limit the recognition of historic action to 10 years to maintain consistency with the sunset dates for mitigation actions.

Thank you for the opportunity to provide this feedback and we look forward to continued engagement in the development of this important program.

Sincerely,

Brian Jones

**To:** methanechallenge@tetrattech.com[methanechallenge@tetrattech.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Butero, Carol  
**Sent:** Fri 11/13/2015 7:35:28 PM  
**Subject:** Submittal of Stakeholder Feedback - Methane Challenge Program  
KM MethaneChallenge Letter 2015 11-13.pdf

Attached please find stakeholder feedback from Kinder Morgan on EPA's Proposed Methane Challenge Program.

Thank you,

Carol Butero  
Kinder Morgan  
370 Van Gordon Street  
Lakewood, CO 80228

Phone: 303-914-7807  
Fax: 303-984-3459

[carol\\_butero@kindermorgan.com](mailto:carol_butero@kindermorgan.com)



November 13, 2015

Via email and online: [methanechallenge@tetrattech.com](mailto:methanechallenge@tetrattech.com)

Carey Bylin  
International Programs Leader  
Oil and Gas at U.S. EPA  
1200 Pennsylvania Avenue N.W.  
Washington, D.C. 20460

**RE: Kinder Morgan Comments on the Natural Gas Star Methane Challenge Program:  
Proposed Framework and Supplementary Technical Information**

Dear Ms. Bylin:

Kinder Morgan, Inc. (Kinder Morgan) submits the following comments in response to EPA's proposed Natural Gas STAR Methane Challenge Program: Proposed Framework and Natural Gas STAR Methane Challenge Program: Supplementary Technical Information. Kinder Morgan appreciates EPA's efforts to propose a voluntary methane emission reduction program which could achieve significant emission reductions in a cost-effective manner as compared to a mandatory prescriptive regulatory program. Kinder Morgan endorses the comments submitted by the Interstate Natural Gas Association of America (INGAA) in full and endorses certain comments submitted by the American Petroleum Institute (API) on the Proposed Framework, as specifically identified below.

With interests in approximately 68,000 miles of natural gas pipelines and ownership of 1.3 trillion cubic feet (Tcf) of underground natural gas storage, Kinder Morgan is the largest natural gas transporter and largest storage operator in North America. Kinder Morgan's natural gas pipelines are connected to every important natural gas resource play, including the Bakken, Eagle Ford, Marcellus, Permian, Utica, Uinta, Haynesville, Fayetteville, Barnett, Mississippi Lime, and Woodford, that will play a significant role in meeting the nation's long-term natural gas supply. Kinder Morgan's operations serve the major natural gas consuming markets of the entire United States. Natural gas liquids production has also grown significantly in this business segment. Kinder Morgan also operates multiple gathering and boosting systems, over 15 gas processing plants, and two liquefied natural gas (LNG) terminals.

Kinder Morgan's natural gas transmission and storage pipeline companies have participated in EPA's Natural Gas STAR Program since 1993. Kinder Morgan's natural gas operations have achieved methane emissions reductions of over 80 Bcf since 1993. Kinder Morgan has achieved those reductions by implementing cost-effective measures to reduce methane releases from its transmission and storage operations and by repairing identified leaks. Various technologies have been implemented to reduce methane emissions including, but not limited to:

- ☐ Implementation of directed inspection and maintenance programs at various compressor stations and storage facilities;
- ☐ Replacing rod packing systems on reciprocating compressor engines when necessary;

- Replacing high-bleed pneumatics;
- Installing vapor recovery systems on storage tanks;
- Pumping or drawing down sections of pipe prior to conducting maintenance activities to minimize blowdown emissions;
- Installing full encirclement or composite sleeves for pipeline maintenance to eliminate the need for pipeline blowdowns; and
- Installing either gas turbines or electric motor driven compression, as appropriate, rather than installing reciprocating compressor engines.

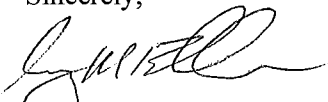
Historically, one of Kinder Morgan's greatest methane reductions has come from preventing natural gas venting or "blowdowns" of natural gas pipeline sections prior to conducting maintenance activities. Drawing down pressures with existing compression, using portable compressors to recompress gas into other pipelines or pipeline sections, and the use of full encirclement or composite sleeves reduces the amount of natural gas that would otherwise be released into the atmosphere when conducting maintenance activities (when appropriately applied, considering safety and other concerns). Kinder Morgan's own efforts to voluntarily reduce methane emissions demonstrate that strict command and control regulatory regimes are simply not the best answer for reducing methane emissions from the oil and natural gas sector, and particularly the transmission and storage sector. The EPA should encourage industry to continue identifying high-impact, cost-effective mitigation options to achieve the greatest emission reductions.

Kinder Morgan will likely participate as a charter member in the Methane Challenge voluntary program. Kinder Morgan is a founding member of ONE Future and will likely participate through ONE Future. We encourage EPA to work with each company to make certain the MOUs remain flexible to provide for uniqueness of each company in terms of each commitment and to incentivize participation.<sup>1</sup>

Kinder Morgan supports the three options proposed in the Methane Challenge Program using BMP, joining ONE Future or making an Emission Reduction commitment to offer flexibility for participants. We fully support including INGAA's Directed Inspection and Maintenance (DI&M) BMP as an alternative to the currently proposed BMPs for reciprocating compressors, centrifugal compressors and equipment leaks. It is our experience through participation in EPA's Natural Gas STAR program that INGAA's DI&M addresses the most important compressor station sources, including "gross emitters" that offer the best opportunity for cost-effective methane emissions reductions.

Kinder Morgan appreciates the opportunity to comment on EPA's Natural Gas STAR Methane Challenge Program: Proposed Framework. We look forward to engaging with you and your staff on these initiatives.

Sincerely,



Gary Buchler  
Chief Operating Officer, Natural Gas Pipelines

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<sup>1</sup> Kinder Morgan may respond to EPA once the MOU and Technical documents are made available and wishes to retain the opportunity to supplement our comments if warranted.

**Answers to EPA's specific questions; Proposed Framework:**

**EPA Question 1: Please indicate whether your company has specific interest in one of the commitment options presented, included the possibility or likelihood of your company marking that commitment.**

**Response:** Kinder Morgan will likely participate as a charter member in the Methane Challenge voluntary program. Kinder Morgan is a founding member of ONE Future and will likely participate through ONE Future.

**EPA Question 2: In addition to recognition through the Program, what are the key incentives for companies to participate in this Program? Should EPA offer some partners extra recognition, such as awards?**

**Response:** Kinder Morgan supports INGAA and API comments. EPA should include credit for emission reductions achieved in the voluntary program if a regulatory program is subsequently proposed. Kinder Morgan supports recognizing partners that join the program and those partners who actively participate and exceed their methane challenge targets. This recognition and/or awards program would be similar to those given under the existing Natural Gas STAR program.

**EPA Question 3: EPA is proposing to launch the Program with charter partners by the end of 2015, but will welcome new partners on an ongoing basis. Please comment on the likelihood of your company committing to join this Program as a charter partner, or at a future date.**

**Response:** Kinder Morgan will likely participate as a charter member in the Methane Challenge voluntary program. Kinder Morgan will respond to EPA once the MOU and Implementation Plan documents are made available. We also appreciate that EPA will welcome new partners on an ongoing basis.

**EPA Question 4: For the BMP option, how can EPA encourage companies to make commitments for sources for which they have not made significant progress in implementing mitigation options? In other words, how can companies be encouraged to participate beyond the sources for which they have already made significant progress?**

**Response:** Kinder Morgan supports INGAA and API comments.

**EPA Question 5: Please provide comments on the sources and corresponding BMPs that are provided in Appendix 2, including any recommended additions, deletions, or revisions.**

**Response:** Kinder Morgan supports INGAA and API comments. Kinder Morgan supports the addition of the INGAA DI&M BMP for reciprocating compressors, centrifugal compressors and equipment leaks.

**EPA Question 6: Please comment on the proposed definitions on the companies or entities that will make BMP commitments, per Appendix 3.**

**Response:** Kinder Morgan supports the comments submitted by INGAA.

**EPA Question 7: Is a 5-year time limit to achieve BMP commitments appropriate? If not, please provide alternate proposals. Would a shorter time limit encourage greater reductions earlier?**

**Response:** Kinder Morgan supports the comments submitted by INGAA and API.

**EPA Question 8: Should EPA offer the Emissions Reduction (ER) approach? If so, please provide specific recommendations for ways that EPA could address the implementation challenges outlined**

**in this document. What is the minimum target company-specific reduction level that should be set for participation in this option? Would your company use this option if it were offered?**

**Response:** Kinder Morgan is a founding member of ONE Future and will likely participate through ONE Future. However Kinder Morgan supports all the options presented in the Methane Challenge program in order to offer flexibility for companies and maximize participation.

**EPA Question 9: To what extent is differentiating the voluntary actions from regulatory actions important to stakeholders? What are the potential mechanisms through which the program could distinguish actions driven by state or federal regulation from those undertaken voluntarily or that go beyond regulatory requirements?**

**Response:** Kinder Morgan supports the comments submitted by INGAA and API.

**EPA Question 10: EPA plans to leverage existing reported data from GHGRP (Subpart W) and supplemental data from companies to EPA. Would e-GGRT system be appropriate mechanism to collect the voluntary supplemental data?**

**Response:** Kinder Morgan agrees the e-GGRT system may be an appropriate mechanism for reporting under the Methane Challenge Program, but voluntary data should be reported separately from the mandatory data and clearly labeled. Kinder Morgan also believes there is an opportunity to modify the existing Natural Gas STAR reporting mechanism. The reporting requirements should not be overly burdensome or companies may be deterred from participating in the program. Since EPA is not expected to propose an actual reporting system until 2016, Kinder Morgan reserves the right to submit additional comments on EPA's reporting system once it has been proposed.

**EPA Question 11: Would companies be willing and able to make commitments related to emissions sources where EPA has proposed, but not finalized, new GHGRP Subpart W requirements?**

**Response:** Kinder Morgan supports INGAA and API comments.

**EPA Question 12. EPA seeks feedback on potential mechanisms for encouraging continued, active participation in Program once a company's initial goals have been achieved.**

**Response:** Kinder Morgan supports the comments submitted by INGAA and API.

**EPA Question 13: EPA is proposing to call this new voluntary effort the "Natural Gas STAR Methane Challenge Program", and welcomes comments and suggestions on this name.**

**Response:** Kinder Morgan supports the comments submitted by INGAA and API.



**Answers to EPA's specific questions; Supplemental Technical Information:**

**EPA Question 1. Are potential partners interested in reporting measured methane emissions for any sources that currently don't include measurement in the quantification options? Please comment on this and, if so, provide information on recommended measurement protocols for sources of interest.**

**Response:** Kinder Morgan supports INGAA comments.

**EPA Question 2. Should intermittent pneumatic controllers be included in the Pneumatic Controllers source? EPA seeks recommendations on whether and how to include intermittent controllers.**

**Response:** Kinder Morgan supports INGAA comments.

**EPA Question 3. For Tanks, EPA seeks comment on whether additional elements collected under GHGRP should be considered for tracking purposes for the Methane Challenge Program.**

**Response:** Kinder Morgan supports INGAA comments.

**EPA Question 4. What types of situations require operators to vent to the atmosphere instead of capturing emissions during liquids unloading? How could this information best be captured in the reported data?**

**Response:** No Kinder Morgan comment.

**EPA Question 5. For liquids unloading, are there additional supplemental data elements or quantification methods needed to demonstrate that operators are minimizing emissions during liquids unloading?**

**Response:** No Kinder Morgan comment.

**EPA Question 6. EPA seeks feedback on methodologies for calculating and tracking centrifugal compressor seal oil degassing and reciprocating compressor rod packing methane emissions for the following operational situations:**

- a. Compressors that route seal oil degassing/rod packing vents to manifolded vents that include sources other than seal oil degassing (e.g., blowdown vents) or seal oil degassing/rod packing emissions from multiple centrifugal compressors.
- b. Compressors that route seal oil degassing/rod packing vents to flare, a thermal oxidizer, or vapor recovery for beneficial use other than as fuel.

**Response:** Kinder Morgan supports INGAA comments.

**EPA Question 7. EPA seeks feedback on methodologies for calculating methane emission reductions for centrifugal compressors that convert from wet seals to dry seals.**

**Response:** Kinder Morgan supports INGAA comments.

**EPA Question 8. For transmission and distribution blowdowns, EPA requests feedback on the proposal of 50% as the minimum reduction percentage commitment, and whether the minimum commitment should be adjusted to serve as an appropriate stretch goal for partner companies. Is the proposed methodology for calculating potential emissions from this source appropriate? The proposed methodology assumes full evacuation of the pipeline to atmospheric pressure; are there circumstances in which companies don't lower pipeline pressure all the way to atmospheric levels, such that using this basis for calculating potential emissions could overstate potential emissions?**

**Response:** Kinder Morgan supports INGAA comments.

**EPA Question 9. For distribution mains, EPA requests feedback on the proposed percentage replacement rates, which include a new proposed category for companies with an inventory of >3000 miles of cast iron and unprotected steel mains.**

**Response:** No Kinder Morgan comment.

**EPA Question 10. EPA seeks feedback on the proposal to use the plastic pipe EF for "Distribution Mains – Cast Iron or Unprotected Steel with Plastic Liners or Inserts" and "Distribution Services – Cast Iron or Unprotected Steel with Plastic Liners or Inserts."**

**Response:** No Kinder Morgan comment.

**EPA Question 11. For distribution mains and services, should "vintage" plastic pipe or "Century" plastic pipe be included with cast iron and unprotected steel in this category (Aldyl A and LDIW Aldyl A Polyethylene gas piping manufactured from 1965 through 1972 and plastic piping extruded by Century Utility Products Inc. from Union Carbide Corporation's DHDA 2077 manufactured between 1970 and 1973 respectively)? In particular, EPA seeks input on whether companies have sufficient available activity data (e.g., known inventories of vintage plastic pipe and annual information on plastic pipeline material) such that they can commit to and track replacement levels, and if so how emissions of this type of pipe should be quantified (e.g., are material- or age-specific emissions factors available?).**

**Response:** No Kinder Morgan comment.

**EPA Question 12. For cast iron services, EPA seeks comment on how to quantify methane emissions, and requests quantification methodology suggestions, including any available data.**

**Response:** No Kinder Morgan comment.

**EPA Question 13. For distribution mains, EPA seeks feedback on whether to include as a mitigation option use of internal or external joint sealants for cast iron pipes greater than 20” in diameter. In particular, EPA seeks feedback about the ability to implement other mitigation options for these pipes (e.g., slip-lining), which reinforce the joints as well as the pipeline. EPA requests commenters to provide relevant supporting data with their response, if available.**

**Response:** No Kinder Morgan comment.

**EPA Question 14. For excavation damages, EPA seeks comment on whether to limit the scope of this source to pipe operating at 15 psi or greater, or whether it should cover excavation damages on all pipe.**

**Response:** Kinder Morgan interprets the section on excavation damages to apply only to natural gas distribution. Since excavation damages are outside the control of pipeline operators, it would be impossible to set company goals and emission reduction targets. Pipeline operators must implement immediate corrective actions to address excavation damage and emergency situations in accordance with PHMSA regulatory requirements and to assure public safety.

**EPA Question 15. Because many excavation damages are technically out of the control of companies, EPA is proposing company-specific goal setting to participate in the Program. We request feedback on this approach, in particular whether companies would be able to set emission reduction targets versus other targets (e.g., reducing number of damages, reducing average shut-in time for all damages, other qualitative targets).**

**Response:** Kinder Morgan interprets the section on excavation damages to apply only to natural gas distribution. Since excavation damages are outside the control of pipeline operators, it would be impossible to set company goals and emission reduction targets. Pipeline operators must implement immediate corrective actions to address excavation damage and emergency situations in accordance with PHMSA regulatory requirements and to assure public safety.

**EPA Question 16. EPA requests feedback on how to quantify methane emissions/gas releases from excavation damages. Is there publically available data on recommended calculation methods for quantifying emissions from this source? Are there any circumstances under which it would be appropriate to use an emission factor (e.g., GRI/EPA or Lamb et al.)?**

**Response:** Kinder Morgan interprets the section on excavation damages to apply only to natural gas distribution. Since excavation damages are outside the control of pipeline operators, it would be impossible to set company goals and emission reduction targets.

**EPA Question 17. The Natural Gas STAR Program Annual Reporting Forms specify Sunset Dates (the length of time a technology or practice can continue to accrue emission reductions after implemented) for mitigation options (<http://www3.epa.gov/gasstar/tools/program-forms.html>). Should the Methane Challenge Program create a similar structure to establish Sunset Dates for designated mitigation options?**

**Response:** Kinder Morgan does not support a Sunset Date. The Methane Challenge program is expected to extend beyond 5 years so no need for a sunset date. For example, the ONE Future methodology,

identified as an option in the Methane Challenge program, is targeting a period of 10 years to achieve their reduction goals. The ONE Future 2025 goal is consistent with the overall emission reduction targets established by the Obama Administration in its Climate Action Plan.

**EPA Question 18. The Methane Challenge Program seeks to stimulate new action to reduce methane emissions while also recognizing past actions undertaken by partners. For some sources, such historic action will be clear through proposed reporting (e.g., facilities that have converted high-bleed pneumatic controllers will show a low number of high-bleeds relative to low-bleed and zero emitting controllers). For other sources, such as cast iron pipe, a low level or nonexistent cast iron could reflect a historic replacement program or the fact that the facility never had such pipe. For practice-based programs, such as that proposed for excavation damages, companies may already have taken steps to reduce damages such that they cannot expect to achieve significantly lower levels. Should the Methane Challenge Program create a mechanism to specifically recognize historic action for certain sources? If so, how could the Program recognize such previous action (for example, by allowing these companies to join the Program and collecting and posting relevant details on previous action prior to joining the Program)?**

**Response:** Kinder Morgan supports INGAA comments.

**To:** Keeble, Gwen[keebleg@oru.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Mon 4/11/2016 2:53:31 PM  
**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>  
Orange and Rockland Utilities, Inc. signed pa.pdf

Hi Gwen,

Attached, please find the revised and signed Partnership Agreement for your files. If you have any further questions, please let me know.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Keeble, Gwen [mailto:keebleg@oru.com]  
**Sent:** Monday, April 11, 2016 10:32 AM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

Hi! Sorry for the delay, we are happy with September 30<sup>th</sup> as our start date, with reporting starting in 2017. Thank you!

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]

**Sent:** Monday, April 11, 2016 10:28 AM

**To:** Keeble, Gwen

**Cc:** Bylin, Carey

**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

Good Morning Gwen,

I work on the Methane Challenge Program with Carey Bylin, and we were wondering if you have been able to confirm a start date yet for the Mains and Services commitment? I will update the Partnership Agreement once this information is confirmed and send you a revised copy.

Thank you for your assistance!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Bylin, Carey  
**Sent:** Monday, March 28, 2016 2:23 PM  
**To:** 'Keeble, Gwen' <[keebleg@oru.com](mailto:keebleg@oru.com)>  
**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

Hi Gwen,

I hope you had a good weekend. Just checking in on this, as I'd like to return the signed Agreement to you today. Please advise on start date. Thank you!

---

Ms. Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

Global Methane Initiative

U.S. Environmental Protection Agency

Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)

1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460



**From:** Keeble, Gwen [<mailto:keebleg@oru.com>]  
**Sent:** Friday, March 25, 2016 10:52 AM  
**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

Great thank you! Let me check with our Gas folks to confirm the start date they'd like to go with. Thank you!

**From:** Bylin, Carey [<mailto:Bylin.Carey@epa.gov>]  
**Sent:** Friday, March 25, 2016 10:45 AM  
**To:** Keeble, Gwen  
**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

Hi Gwen,

Thank you for getting in touch. Yes, we received your Partnership Agreement and will get a countersigned version to you today or Monday.

The Start Date is listed as "2016" for Mains and Services. The Start Date is supposed to be a specific date that is within six months of joining the Program, so the latest it can be is September 30, 2016. Are you okay with our recognizing your Start Date as 9/30/16? Or you can choose another date between the launch and that point. The significance of the start date is that is when companies need to start collecting the data they need to track commitments (though for founding partners comprehensive reporting will start for the 2017 calendar year).

Please advise what you would like your start date to be and I will make the needed change to the



Partnership Agreement.

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Ms. Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

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U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460



**From:** Keeble, Gwen [<mailto:keebleg@oru.com>]

**Sent:** Friday, March 25, 2016 10:19 AM

**To:** 'bylin.carey@epa.gov'

**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc.

Good morning – I am confirming you have received our agreement document and checking to see if you need anything further. I spoke with Bill Slade this morning who suggested I might want to check in to be sure our information was received, and the start date is appropriate.

Thanks!

Gwen Keeble

845-577-3534

917-418-5764

**From:** Keeble, Gwen

**Sent:** Wednesday, March 23, 2016 3:17 PM

**To:** 'elina.bouloubasis@erg.com'; 'bylin.carey@epa.gov'

**Subject:** FW: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc.

Today, Orange and Rockland Utilities, Inc. filed its signed Methane Challenge Partnership Agreement via email, with a hard copy sent overnight. Below please see the additional requested information.

Orange and Rockland will be represented at the forum by our colleagues from Con Ed Co. of NY, Mr. Kyle Kimball, VP of Government Relations, and Mr. Bill Slade the Emerging Issues Manager. Please feel free to reach out to me with any questions or concerns.

*Gwen Keeble*

*Section Manager – Environmental Services*

*Orange and Rockland Utilities, Inc.*

*845-577-3534*

*917-418-5764*

[keebleg@oru.com](mailto:keebleg@oru.com)

See below for additional requested information from Orange and Rockland Utilities.

-----Original Message-----

From: U.S. EPA's Natural Gas STAR Program [<mailto:gasstar@erg.com>]

Sent: Wednesday, March 16, 2016 5:15 PM

To: Slade, William

Subject: Thank You For Your Interest in the Natural Gas STAR Methane Challenge Program  
<External Sender>

EXTERNAL SENDER. Do not click on links if sender is unknown and never provide user ID or password.

Dear Bill:

On behalf of the U.S. Environmental Protection Agency (EPA), I am pleased to hear of your interest in joining the Natural Gas STAR Methane Challenge Program as a founding partner. We will be officially launching this new program at the Global Methane Forum (GMF) at 10:00am on March 30, 2016 in Washington, D.C.

The launch event will be hosted by Janet McCabe, EPA's Acting Assistant Administrator for Air and Radiation. If you confirm your participation as a founding partner, we encourage you to attend this exciting event. We will recognize your company even if you are not able to participate in person. Please be aware of the following next steps:

-By March 23, please contact us (see contact information below) to confirm that you will be joining as a founding partner, and provide your signed Partnership Agreement.

**The Orange and Rockland partnership agreement was emailed today, and sent via hard copy today.**

o Provide us a short bio (approximately 75 words) describing your company, your commitments, and highlighting reasons for becoming a Methane Challenge partner.

**Orange and Rockland has participated in the Natural Gas STAR program since 1994, and welcomes the opportunity to join the Methane Challenge. Orange and Rockland distributes natural gas to 133,267 customers in Orange and Rockland counties in New York.**

**Last year the Company made significant improvements in reducing the total leak backlog, replacing 17 miles of leak prone pipe in each of the past three years. Our goal with this Partnership Agreement is to replace 6.5% of our cast iron and unprotected (bare) steel mains by the end of 2016.**

o If your company plans to attend the Launch Event, provide the name, title, and contact information of the person who will be representing your company at the event and, if different, the contact information for the individual coordinating your company's participation at the event.

**Orange and Rockland will be represented by our colleagues at Con Ed Co. of NY:**

**Mr. Kyle Kimball**

**Vice President, Government Relations**

**Consolidated Edison Company of New York**

**4 Irving Place**

**New York, NY 10003**

[kimballk@coned.com](mailto:kimballk@coned.com)

**212-460-2706**

**Coordinating:**

**Mr. William V. Slade**

Ex. 6 - Personal Privacy (cell)

[sladew@coned.com](mailto:sladew@coned.com)

-Also, by March 23, please provide a link to your company's website as well as the specific way your company should be listed on the Methane Challenge Program website.

**Orange and Rockland Utilities, Inc.**

[www.oru.com](http://www.oru.com)

-Be sure to register for the GMF as soon as possible (<http://globalmethane.org/forum/>).

**Both Kyle Kimball and Bill Slade are registered for the Global Methane Forum**

Please send the above information to myself and Elina Bouloubasis ([elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)). Once we receive confirmation of your participation, we will provide more specific details about the launch event agenda, which will include recognition of each partner and individual and group photos. Please note that due to time constraints, we do not anticipate that partner companies will be able to give individual remarks at the event.

As a new Methane Challenge Program partner, there are a few next steps to be aware of. Within six months after joining the Program, each partner must develop an Implementation Plan to provide details on their planned participation, such as anticipated rate of progress, key milestones, and other relevant context. See the following Guidelines document for more information about how to develop an Implementation Plan:  
[http://www3.epa.gov/gasstar/documents/MC\\_IP\\_Guidelines\\_Final.pdf](http://www3.epa.gov/gasstar/documents/MC_IP_Guidelines_Final.pdf).

We will also be working with partners as we develop the Program's reporting system, and will be seeking input and feedback in the coming months. Finally, in an effort to further highlight our partners' accomplishments, we aim to work with partners to develop "Fact Sheets" that cover notable historical actions taken in advance of the Methane Challenge Program in efforts to mitigate methane emissions.

We encourage you to attend the full GMF event that will offer high-level plenary sessions on cross-cutting issues such as project financing, joint Global Methane Initiative (GMI)-Climate & Clean Air Coalition (CCAC) discussions on projects and policy, and ample opportunities for networking with methane experts in the public and private sectors from around the world. A draft agenda is available at <http://globalmethane.org/forum/>. We hope you are able to attend and participate in the sessions.

Please feel free to contact me or Justin Pryor (202-343-9258 or [pryor.justin@epa.gov](mailto:pryor.justin@epa.gov)) with any questions you may have about the Methane Challenge Partnership. Please contact Elina Bouloubasis (703-373-0149 or [elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)) with any questions about the launch event. Thank you again for your support of the Methane Challenge Program and we hope to see you at the launch event in Washington, D.C.

Sincerely,

Ms. Carey Bylin

U.S. Environmental Protection Agency

202-343-9669



## Natural Gas STAR Methane Challenge Program: Partnership Agreement for Best Management Practice (BMP) Commitment

The Natural Gas STAR Methane Challenge Program is a flexible, voluntary partnership between the U.S. Environmental Protection Agency (EPA) and oil and natural gas companies. This voluntary Program allows the EPA to collaborate with Partners to promote and track ambitious, transparent commitments to voluntarily reduce methane emissions beyond regulatory requirements and to recognize Partners for their progress. By signing this agreement, **Orange and Rockland Utilities, Inc.** agrees to join the U.S. EPA to reduce methane emissions through a Best Management Practice (BMP) Commitment. The BMP Commitment entails a Partner commitment to company-wide implementation of BMPs to reduce methane emissions from key sources by a future target date. Partners commit to at least one emission source and specify a target year of completion (maximum of five [5] years from commitment start date).

**Partner's Best Management Practice Commitment:** Please specify participating sources, start date, and target achievement year in the table below; check all that apply.

	Source	Start Date	Achievement Year
<b>Onshore Production</b>			
<input type="checkbox"/>	Pneumatic Controllers		
<input type="checkbox"/>	Equipment Leaks/Fugitive Emissions		
<input type="checkbox"/>	Liquids Unloading		
<input type="checkbox"/>	Pneumatic Pumps		
<input type="checkbox"/>	Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
<b>Gathering and Boosting</b>			
<input type="checkbox"/>	Pneumatic Controllers		
<input type="checkbox"/>	Equipment Leaks/Fugitive Emissions		
<input type="checkbox"/>	Pneumatic Pumps		
<input type="checkbox"/>	Fixed Roof, Atmospheric Pressure Hydrocarbon Liquid Storage Tanks		
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/>	Centrifugal Compressors - Venting		
<b>Natural Gas (NG) Processing</b>			
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/>	Centrifugal Compressors - Venting		
<b>NG Transmission &amp; Underground Storage</b>			
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent		
<input type="checkbox"/>	Centrifugal Compressors - Venting		
<input type="checkbox"/>	Equipment Leaks/Fugitive Emissions		
<input type="checkbox"/>	Transmission Pipeline Blowdowns between Compressor Stations		
<input type="checkbox"/>	Pneumatic Controllers		
<b>NG Distribution</b>			
<input type="checkbox"/>	M&R Stations/City Gates		
X	Mains – Cast Iron and Unprotected Steel (Commitment Rate: <u>6.5%</u> )	<u>9/30/2016</u> <sup>J.P.</sup>	2017
X	Services – Cast Iron and Unprotected Steel	<u>9/30/2016</u>	2017
<input type="checkbox"/>	Distribution Pipeline Blowdowns (Commitment Rate: _____)	<u>J.P.</u>	
<input type="checkbox"/>	Excavation Damages		

\* Revisions confirmed by Partner 4-11-16



## **EPA's Responsibilities**

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1. Assign a Methane Challenge Program Representative responsible for assisting the Partner in implementing the Program.
2. Provide relevant Program details, which can be found in the Natural Gas STAR Methane Challenge Program: BMP Framework and Methane Challenge BMP Supplemental Technical Information documents.
3. Assist Partners with Program implementation by:
  - (i) providing relevant technical information;
  - (ii) developing a mechanism for reporting supplemental information;
  - (iii) updating Program information as needed, including updating the list of participating sources and mitigation options covered in the Program; and
  - (iv) answering questions about Program participation.
4. Encourage new and innovative methane emission mitigation technologies, as well as methodologies for monitoring and measuring progress, and incorporate them into the Program.
5. Track Partner progress through provision of a user-friendly reporting system through which Partners can report supplementary data relevant to achieving their Methane Challenge commitments. Supplementary data will be used in conjunction with data that are already collected by Subpart W of the Greenhouse Gas Reporting Program (GHGRP) to track Partner progress.
6. Promote the transparency and visibility of the Methane Challenge Program and member commitments and achievements, by publicly releasing non-confidential data that is submitted either through the Methane Challenge Program or through the GHGRP.
7. Acknowledge Program Partners through announcement of commitments, Implementation Plans, progress, and achievement of goals on the EPA's Methane Challenge website.

## **Natural Gas STAR Methane Challenge Partner's Responsibilities**

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1. Designate a company representative as the Natural Gas STAR Methane Challenge Program Implementation Manager responsible for serving as the contact point concerning implementation of this voluntary agreement.
2. Submit an Implementation Plan within six (6) months of signing this agreement outlining expected activities and milestones for achieving commitments.
3. Specify commitment start date(s), which will be within six (6) months of joining the Program.
4. Implement BMPs for the selected participating sources across company operations to achieve mitigation commitments by the specified commitment target year, not to exceed five (5) years from the specified commitment start date.
5. Report on an annual basis non-CBI supplementary data relevant to achieving Methane Challenge commitments, as outlined in Program documents. Supplementary data will be used in conjunction with data collected by Subpart W of the GHGRP to demonstrate Partner progress within the Program.
6. Communicate participation to employees.

## **General Terms**

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1. This voluntary partnership is intended to promote and recognize voluntary actions taken by oil and gas companies to reduce methane emissions from their operations. It is understood that Partners to this Program may have operations covered by federal, state, and/or other regulatory requirements. It is anticipated that Partners may achieve their Methane Challenge Program commitments through a combination of voluntarily- and regulatorily-driven actions. Participation in this Program does not in any way change legal obligations of Partners to comply with applicable laws regulations.
2. This agreement can be terminated by either party at any time, with no notice or penalties and no further obligation. The EPA agrees not to publicize a Partner's withdrawal from the Program beyond removing the Partner's name from Methane Challenge website. By setting out a target date on this form the Company does not intend to expose itself to regulatory liability if it cannot meet the target date.





3. The Partner agrees that the activities it undertakes connected with this Partnership Agreement are not intended to provide services to the federal government and that the Partner will not seek compensation from a federal agency.
4. The Partner agrees that it will not claim or imply that its participation in the Program constitutes the EPA approval or endorsement of anything other than the commitment to the Program. The Partner cannot use or appropriate the EPA seal or identifier in any way.
5. In order to maintain status as a Partner in the Methane Challenge Program, the Partner agrees to annually report specified supplemental data, per Program reporting specifications.
6. If the Partner is unable to meet a BMP commitment by the target year, and intends to remain in the Program, the Partner company will provide relevant contextual information for the delay and set a new target year. The EPA will note the adjustment to the implementation timeline on the Methane Challenge website.
7. All commitments made by the EPA in this Partnership Agreement are subject to the availability of appropriated funds. Nothing in this Partnership Agreement, in and of itself, obligates the EPA to expend appropriations or to enter into any contract, assistance agreement, interagency agreement, or incur other financial obligations that would be inconsistent with Agency budget priorities. This Partnership Agreement does not exempt the Partner from the EPA policies governing competition for assistance agreements. Any transaction involving reimbursement or contribution of funds between the parties to this Partnership Agreement will be handled in accordance with applicable laws, regulations, and procedures under separate written agreements.

### Signatures and Partner Contact Details

Authorized Company Representative: Roberta Scerbo for Frank Peverly

Signature: 

Date: 03/23/2016

Authorized U.S. EPA Representative: Paul M. Gunning, Director, Climate Change Division

Signature: 

Date: 3/25/2016

### Partner's Designated Natural Gas STAR Methane Challenge Implementation Manager:

Name: Flannan Hehir

Title: Director

Address: 390 West Route 59

City/State/Zip: Spring Valley, NY 10977

Telephone/Fax: 845-577-3176

E-mail: HEHIRF@ORU.COM

### Instructions

Please send this form to: Natural Gas STAR Methane Challenge Program

Standard Mail: Mail Code 6207M  
1200 Pennsylvania Ave NW Washington DC 20460

Overnight Mail: 1201 Constitution Ave NW, Room Number 4353 UU  
Washington DC 20004

**To:** Keeble, Gwen[keebleg@oru.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Mon 4/11/2016 2:34:04 PM  
**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

Excellent, thank you for the confirmation. Revised Partnership Agreement to follow shortly.

Justin

**From:** Keeble, Gwen [mailto:keebleg@oru.com]  
**Sent:** Monday, April 11, 2016 10:32 AM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
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**Subject:** RE: Additional information pertaining to the Natural Gas STAR Methane Challenge Program -- Orange and Rockland Utilities, Inc. <External Sender>

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Thank you for your assistance!

Respectfully,

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

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Ms. Carey Bylin

International Programs Leader, Oil and Gas

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International Programs Leader, Oil and Gas

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*Gwen Keeble*

*Section Manager – Environmental Services*

*Orange and Rockland Utilities, Inc.*

*845-577-3534*

*917-418-5764*

*[keebleg@oru.com](mailto:keebleg@oru.com)*

See below for additional requested information from Orange and Rockland Utilities.

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Sent: Wednesday, March 16, 2016 5:15 PM

To: Slade, William

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**Last year the Company made significant improvements in reducing the total leak backlog, replacing 17 miles of leak prone pipe in each of the past three years. Our goal with this**



**Partnership Agreement is to replace 6.5% of our cast iron and unprotected (bare) steel mains by the end of 2016.**

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**Mr. Kyle Kimball**

**Vice President, Government Relations**

**Consolidated Edison Company of New York**

**4 Irving Place**

**New York, NY 10003**

**[kimballk@coned.com](mailto:kimballk@coned.com)**

**212-460-2706**

**Coordinating:**

**Mr. William V. Slade**

**(b)(6) personal privacy (cell)**

**[sladew@coned.com](mailto:sladew@coned.com)**

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**Orange and Rockland Utilities, Inc.**

**[www.oru.com](http://www.oru.com)**

-Be sure to register for the GMF as soon as possible (<http://globalmethane.org/forum/>).

**Both Kyle Kimball and Bill Slade are registered for the Global Methane Forum**

Please send the above information to myself and Elina Bouloubasis ([elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)). Once we receive confirmation of your participation, we will provide more specific details about the launch event agenda, which will include recognition of each partner and individual and group photos. Please note that due to time constraints, we do not anticipate that partner companies will be able to give individual remarks at the event.

As a new Methane Challenge Program partner, there are a few next steps to be aware of. Within six months after joining the Program, each partner must develop an Implementation Plan to provide details on their planned participation, such as anticipated rate of progress, key milestones, and other relevant context. See the following Guidelines document for more information about how to develop an Implementation Plan:  
[http://www3.epa.gov/gasstar/documents/MC\\_IP\\_Guidelines\\_Final.pdf](http://www3.epa.gov/gasstar/documents/MC_IP_Guidelines_Final.pdf).

We will also be working with partners as we develop the Program's reporting system, and will be seeking input and feedback in the coming months. Finally, in an effort to further highlight our partners' accomplishments, we aim to work with partners to develop "Fact Sheets" that cover notable historical actions taken in advance of the Methane Challenge Program in efforts to mitigate methane emissions.

We encourage you to attend the full GMF event that will offer high-level plenary sessions on cross-cutting issues such as project financing, joint Global Methane Initiative (GMI)-Climate & Clean Air Coalition (CCAC) discussions on projects and policy, and ample opportunities for networking with methane experts in the public and private sectors from around the world. A

draft agenda is available at <http://globalmethane.org/forum/>. We hope you are able to attend and participate in the sessions.

Please feel free to contact me or Justin Pryor (202-343-9258 or [pryor.justin@epa.gov](mailto:pryor.justin@epa.gov)) with any questions you may have about the Methane Challenge Partnership. Please contact Elina Bouloubasis (703-373-0149 or [elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)) with any questions about the launch event. Thank you again for your support of the Methane Challenge Program and we hope to see you at the launch event in Washington, D.C.

Sincerely,

Ms. Carey Bylin

U.S. Environmental Protection Agency

202-343-9669

[bylin.carey@epa.gov](mailto:bylin.carey@epa.gov)

**To:** Kemkar, Neal (GE Corporate)[neal.kemkar@ge.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]; Franklin, Pamela[Franklin.Pamela@epa.gov]; Waltzer, Suzanne[Waltzer.Suzanne@epa.gov]  
**From:** Gunning, Paul  
**Sent:** Wed 7/29/2015 6:09:09 PM  
**Subject:** RE: Thanks

Neal, great to see you yesterday. Thanks again for coming in and sharing all that info. with us. It really is exciting to see all of great things GE is doing in this important area. In terms of DOT contacts, Carey Bylin (copied above) who is leading our Natural Gas STAR Methane Challenge effort has been the main POC with PHMSA. I believe Carey has been in contact with Bob Smith.

Please feel free to follow up with her if you need additional detail or if you have any questions.

Thanks again.

Paul

Paul M. Gunning  
Director, Climate Change Division  
U.S. EPA (6207J)  
1200 Pennsylvania Avenue  
Washington, DC 20460

Direct (202) 343-9736  
Fax (202) 343-2202  
Cell (202) 251-1436

-----Original Message-----

From: Kemkar, Neal (GE Corporate) [mailto:neal.kemkar@ge.com]  
Sent: Tuesday, July 28, 2015 3:59 PM  
To: Gunning, Paul  
Subject: Thanks

Paul - appreciate the time today, and the offer to share the right folks for us to connect with at phmsa going forward. Will be great to close the loop over there as well. Thanks, Neal

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**Cc:** Manfredi.Caltagirone@unep.org[Manfredi.Caltagirone@unep.org]  
**From:** Philip.Swanson.Affiliate@unep.org  
**Sent:** Mon 4/11/2016 4:47:28 PM  
**Subject:** Fw: Sharing of Appendix A

Carey,  
I would assume this promotes harmonisation. Please let me know if you see any problems with Fiji's proposal. Thanks. Best,  
Phil

-----Forwarded by Philip Swanson/DTIE/UNEP/NBO/UNO on 04/11/2016 06:45PM -----  
**To:** "Philip.Swanson.Affiliate@unep.org" <Philip.Swanson.Affiliate@unep.org>,  
"Manfredi.Caltagirone@unep.org" <Manfredi.Caltagirone@unep.org>  
**From:** Fiji George <Fiji\_George@SWN.COM>  
**Date:** 04/11/2016 05:59PM  
**Subject:** Sharing of Appendix A

Phil and Manfredi,

As you know ONE future will be part of the US EPA's methane challenge program. One issue we are working to incorporate is the use of direct measurements and I am trying to ensure consistency with all voluntary program. If it is ok with you, I like to share the Appendix A with my ONE Future colleagues (they had already seen the draft) and essentially I like to incorporate Appendix A to the ONE Future program by reference or at least incorporate most of it. This I believe will help both programs and members like SWN who are in both programs.

**Fiji George**  
**Director, Strategic Solutions**

**Tel: 832-796-2891**

**Mobile:** Ex. 6 - Personal Privacy

**Email:** [fiji.george@swn.com](mailto:fiji.george@swn.com)

Notice: This e-mail may contain privileged and/or confidential information and is intended only for the addressee. If you are not the addressee or the person responsible for delivering it to the addressee, you may not copy or distribute this communication to anyone else. If you received this communication in error, please notify us immediately by telephone or return e-mail and promptly delete the original message from your system.

**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**Cc:** dnelson@edf.org[dnelson@edf.org]; CerqueiraJ@state.gov[CerqueiraJ@state.gov]; Manfredi.Caltagirone@unep.org[Manfredi.Caltagirone@unep.org]  
**From:** Philip.Swanson.Affiliate@unep.org  
**Sent:** Mon 11/2/2015 7:57:51 AM  
**Subject:** Re: OGMP and Methane Challenge

Carey,  
Could joining OGMP be one option for US companies to meet the requirements of the new Methane Challenge program, similar to the way ONE Future is an option?

Moreover, the more US companies we get into OGMP, the more attractive it is likely to be for non-US companies. Thanks and best regards,  
Phil

-----Philip Swanson/DTIE/UNEP/NBO/UNO wrote: -----

To: Bylin.Carey@epa.gov  
From: Philip Swanson/DTIE/UNEP/NBO/UNO  
Date: 10/22/2015 09:29AM  
Cc: Bartos.Scott@epa.gov, "Drew Nelson" <dnelson@edf.org>, CerqueiraJ@state.gov, Manfredi Caltagirone/DTIE/UNEP/NBO/UNO@UNON  
Subject: OGMP and Methane Challenge

Hi Carey,  
Do you have more info yet on the Methane Challenge? As Scott may have mentioned, I got a question at last week's IPIECA methane workshop on how this and OGMP were coordinated. There were also comments in the OGMP SG and information meetings about proliferation of initiatives in this area, e.g., Hess noted it only had bandwidth for one (and chose One Future). Ideally companies decide to join OGMP on its merits, but I know they pay attention to government signals. Might Methane Challenge effectively push OGMP out of market for US companies? If so, this could also make it less attractive for non-US companies. Best,  
Phil

**From:** McCabe, Janet

**Location:** WJC-N 5400 + Video with RTP + Ex. 6 - Personal Privacy Participant Code:

Ex. 6 - Personal Privacy

**Importance:** Normal

**Subject:** Meet with Bob Hickmott, The Smith-Free Group re: methane (Confirmed)

**Start Date/Time:** Tue 12/1/2015 6:30:00 PM

**End Date/Time:** Tue 12/1/2015 7:30:00 PM

RE: December Meeting Request

Confirmed 12/1 at 1:30pm: December Meeting Request

RE: Confirmed 12/1 at 1:30pm: December Meeting Request

FW: EPA meeting attendees for Anadarko

EPA HQ Leave Behind Final Dec 1 2015 .docx

**To:** McCabe, Janet; Goffman, Joe; Tsirigotis, Peter; Cozzie, David; Dunham, Sarah; Gunning, Paul; Stewart, Lori; Walter, Suzanne; DeFigueiredo, Mark; Beeler, Cindy; Card, Joan; Vetter, Cheryl, Rao, Raj; Koerber, Mike

**Outside Attendees:**

- Julia Jones, Legal Counsel, Energy & Production, Anadarko
- Angela Zivkovich, Senior Health, Safety & Environment, Anadarko
- Mark Hanley, Govt. Relations Director, Anadarko
- Mike Long
- Bob Hickmott, Consultant

**To:** Bob Hickmott[rhickmott@smithfree.com]  
**From:** Atkinson, Emily  
**Sent:** Tue 11/17/2015 6:39:47 PM  
**Subject:** Confirmed 12/1 at 1:30pm: December Meeting Request

Hi Bob,

You are confirmed for an hour long meeting on Tuesday, December 1 at 1:30pm with Janet McCabe and Joe Goffman.

Directions and procedures to 1200 Pennsylvania Avenue NW:

**Metro:** If you come by Metro get off at the Federal Triangle metro stop. Exit the metro station and go up two sets of escalators to the surface level and turn right. You will see a short staircase and wheelchair ramp leading to a set of glass doors with the EPA logo - that is the William Jefferson Clinton Federal Building, North Entrance.

**Taxi:** Direct the taxi to drop you off on 12th Street NW, between Constitution and Pennsylvania Avenues, at the elevator for the Federal Triangle metro stop - this is almost exactly half way between the two avenues on 12<sup>th</sup> Street NW. Facing the building with the EPA logo and American flags, walk toward the building and take the glass door on your right hand side with the escalators going down to the metro on your left - that is the North Lobby of the William Jefferson Clinton building.

**Security Procedures:** A government issued photo id is required to enter the building and it is suggested you arrive 15 minutes early in order to be cleared and arrive at the meeting room on time. Upon entering the lobby, the meeting attendees will be asked to pass through security and provide a photo ID for entrance. Let the guards know that you were instructed to call 202-564-7404 for a security escort.

Please send me a list of participants in advance of the meeting and feel free to contact me should you need any additional information.

Emily

Emily Atkinson  
Staff Assistant

Immediate Office of the Acting Assistant Administrator  
Office of Air and Radiation, USEPA  
Room 5406B, 1200 Pennsylvania Avenue NW  
Washington, DC 20460  
Voice: 202-564-1850



Email: [atkinson.emily@epa.gov](mailto:atkinson.emily@epa.gov)

**From:** Bob Hickmott [<mailto:rhickmott@smithfree.com>]  
**Sent:** Tuesday, November 17, 2015 11:10 AM  
**To:** Atkinson, Emily <[Atkinson.Emily@epa.gov](mailto:Atkinson.Emily@epa.gov)>  
**Subject:** RE: December Meeting Request

Emily –

Sold! Thank you, we look forward to it.

I will provide you with our attendees – likely no more than five. Please let me know who will be attending within OAR.

Many thanks,

Bob Hickmott

202/626-6146

c) 202/215-2303

**From:** Atkinson, Emily [<mailto:Atkinson.Emily@epa.gov>]  
**Sent:** Tuesday, November 17, 2015 11:10 AM  
**To:** Bob Hickmott <[rhickmott@smithfree.com](mailto:rhickmott@smithfree.com)>  
**Subject:** RE: December Meeting Request

Hi Bob,

It looks like Janet McCabe and Joe Goffman could fit in an hour meeting on Tuesday, December 1 at 1:30pm. Let me know if this could work on your end.

Thanks.

Emily

Emily Atkinson  
Staff Assistant

Immediate Office of the Acting Assistant Administrator  
Office of Air and Radiation, USEPA  
Room 5406B, 1200 Pennsylvania Avenue NW  
Washington, DC 20460  
Voice: 202-564-1850  
Email: [atkinson.emily@epa.gov](mailto:atkinson.emily@epa.gov)

## **OVERVIEW OF COMMENTS ON EPA'S PROPOSED AIR RULES (2015)**

### **Anadarko Petroleum Corporation – An Industry Leader**

**December 1, 2015**

Anadarko Petroleum Corporation is one of the nation's leading producers of clean-burning natural gas. We are among the world's largest independent oil and natural gas exploration and production companies operating approximately 25,000 wells in the United States. Anadarko's onshore U.S. operations are located in the Rocky Mountain areas, the southern U.S., the Appalachian basin and Alaska. We are proud that our company's voluntary actions and collaborative approach with regulators and other stakeholders are resulting in cleaner air, fewer emissions and more of our product reaching our customers.

Our company has played a transformative role in how energy resources are brought produced, which includes implementing emission-reduction technologies and best practices across our operating areas. We also focus on improving the science around methane emissions through studies with respected academic institutions and the Environmental Defense Fund. We demonstrated our support for the collaborative, constructive and state-led approach that resulted in Colorado's revision of Regulation No. 7 on air quality.

These constructive and collaborative efforts are reducing emissions and ensuring natural gas remains abundant and affordable as it continues to be the most reliable and scalable option available for achieving U.S. carbon-reduction targets. We encourage the Environmental Protection Agency (EPA) to continue to enhance the opportunities to provide companies incentives for early action, including by providing states the maximum flexibility in developing their programs.

#### **Source Determination: Proposed Rule *Determination for Certain Emission Units in the Oil and Natural Gas Sector*, 40 C.F.R. Parts 49, 51, 52, 70, 71**

Federal and state emission control requirements for upstream oil and natural gas facilities are based on the type of equipment installed. The type of equipment on-site will not change based on the aggregation of locations. The proposal will simply change the complexity of permitting with negligible air quality improvements.

This proposed rule will overwhelm permitting agencies with permit applications and permit modification applications; permits will not be issued in a predictable timeframe causing delays for oil and natural gas development and great regulatory uncertainty.

Anadarko agrees clarification will help both the regulators and regulated community, but that clarification should comport with the CAA language and case law. Anadarko is proposing the following alternative language to provide the balance:

“Contiguous or adjacent properties” mean surface areas with an affixed building, structure, facility or installation including permanently graded or cleared areas for such building, structure, facility or installation, that share an edge/boundary, physically touch, and are adjoining or physically abutting.

As proposed, the rule suffers from a number of legal flaws that will subject the rule to legal challenge and possibly more uncertainty. We believe this is not the objective of EPA, nor the desire of the regulated community. EPA should ensure the rule is addressing the legal concerns raised in comments, and work directly with the oil and natural gas sector to develop the appropriate guidance.

This rulemaking: (1) offers minimal to no environmental benefit; (2) fails to evaluate the economic impacts required under the Clean Air Act (CAA); and (3) significantly increases administrative burden, costs, delays and inefficiencies to permitting programs nationwide.

### **New Source Performance Standard (NSPS) Subpart OOOOa: Proposed Rule *Standards of Performance for New Stationary Sources: Oil and Natural Gas Production and Natural Gas Transmission and Distribution***

We share the concerns of our industry that EPA's one-size-fits-all proposed methane regulations would significantly and unnecessarily increase costs. Such an approach will also carry the unintended consequence of curbing further emission reductions by discouraging voluntary, collaborative and state-based solutions that have proven successful in encouraging innovation and improving our industry's environmental performance.

We support EPA's stated objectives to achieve the most reductions with the least regulatory burden. However, the proposed rulemaking deviates from this stated goal on a number of levels. Among the most notable, is the proposal by EPA to impose a leak detection and repair (LDAR) program on states that already have legally and practicably enforceable programs. The rule should provide states the ability to develop a state-specific LDAR program. The federal rulemaking can provide general principles for a program, without prescriptive requirements dictating the components of a state program. The rule should further affirm that a state with an existing LDAR program that meets the general principles, also meets the requirements of the federal rule.

### **Federal Implementation Plan (FIP) for Managing Air Emissions from True Minor Sources Engaged in Oil and Natural Gas Production in Indian Country**

As written, this particular rule has limited utility since it can only be utilized in attainment areas and for true minor sources. The FIP should be modified to:

- Include a plan for areas transitioning from attainment to nonattainment;
- Provide a streamlined mechanism for synthetic minors; and
- Allow for a pre-construction registration and post-production emission calculations.

### **Natural Gas STAR Methane Challenge**

This voluntary program comes on top of the ongoing aforementioned rule makings and other regulations for the oil and natural gas industry, which include: lowered Ozone National Ambient Air Quality Standard, expanded greenhouse gas (GHG) reporting rule, Bureau of Land Management fracking rule, GHG regulation of new and existing utilities, Refinery Sector Rule, Council on Environmental Quality guidance on addressing climate change under the National Environmental Policy Act, and Waters of the US.

With all the other regulatory activities, at this time, it will be difficult for industry to find incentives or the resources to pursue voluntary measures as reflected in the Methane Challenge. To date, EPA has not adequately created synergy between its voluntary program and numerous other regulatory initiatives. Program participation could be increased if EPA takes a more holistic view of the burdens it is imposing on industry and develops a program that provides a business justification. We encourage EPA to collaborate with industry around voluntary programs that maximize methane reductions without the burden of formal regulatory initiatives that are limited in focus and effectiveness.

**To:** Atkinson, Emily[Atkinson.Emily@epa.gov]  
**From:** Bob Hickmott  
**Sent:** Mon 11/30/2015 4:23:21 PM  
**Subject:** FW: EPA meeting attendees for Anadarko

Emily -

One brief change for our group tomorrow at the 1:30 meeting:

Our operations representative will be Mike Long, so neither Bill Grygar or Keith Nosich will attend. Our attendees will be Julia Jones, Angela Zivkovich, Mark Hanley and Mike Long, along with me.

Thank you and we'll see you tomorrow.

Bob Hickmott  
202/215-2303

**To:** Atkinson, Emily[Atkinson.Emily@epa.gov]  
**Cc:** Rebecca London[rlondon@smithfree.com]  
**From:** Bob Hickmott  
**Sent:** Wed 11/25/2015 4:09:48 PM  
**Subject:** RE: Confirmed 12/1 at 1:30pm: December Meeting Request

Emily:

For our meeting next Tuesday the 1st with Janet and Joe and your OAR colleagues, the following will be attending:

Julia Jones, Legal Counsel, Energy & Production, Anadarko

Angela Zivkovich, Senior Health, Safety & Environment, Anadarko

Mark Hanley, Govt. Relations Director, Anadarko

Bill Grygar, Health, Safety & Environment Director, Anadarko

Bob Hickmott, Consultant

At some point, can you please provide me with the likely EPA attendees?

Thank you and best wishes for Thanksgiving holiday,

Bob Hickmott

202/215-2303

**From:** Atkinson, Emily [mailto:Atkinson.Emily@epa.gov]  
**Sent:** Tuesday, November 17, 2015 1:40 PM  
**To:** Bob Hickmott <rhickmott@smithfree.com>  
**Subject:** Confirmed 12/1 at 1:30pm: December Meeting Request

Hi Bob,

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Taxi: Direct the taxi to drop you off on 12th Street NW, between Constitution and Pennsylvania Avenues, at the elevator for the Federal Triangle metro stop - this is almost exactly half way between the two avenues on 12<sup>th</sup> Street NW. Facing the building with the EPA logo and American flags, walk toward the building and take the glass door on your right hand side with the escalators going down to the metro on your left - that is the North Lobby of the William Jefferson Clinton building.

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Please send me a list of participants in advance of the meeting and feel free to contact me should you need any additional information.

Emily

Emily Atkinson  
Staff Assistant

Immediate Office of the Acting Assistant Administrator  
Office of Air and Radiation, USEPA  
Room 5406B, 1200 Pennsylvania Avenue NW  
Washington, DC 20460  
Voice: 202-564-1850  
Email: [atkinson.emily@epa.gov](mailto:atkinson.emily@epa.gov)

**From:** Bob Hickmott [<mailto:rhickmott@smithfree.com>]  
**Sent:** Tuesday, November 17, 2015 11:10 AM  
**To:** Atkinson, Emily <[Atkinson.Emily@epa.gov](mailto:Atkinson.Emily@epa.gov)>  
**Subject:** RE: December Meeting Request

Emily –

Sold! Thank you, we look forward to it.

I will provide you with our attendees – likely no more than five. Please let me know who will be attending within OAR.

Many thanks,

Bob Hickmott

202/626-6146

c) 202/215-2303

**From:** Atkinson, Emily [<mailto:Atkinson.Emily@epa.gov>]  
**Sent:** Tuesday, November 17, 2015 11:10 AM  
**To:** Bob Hickmott <[rhickmott@smithfree.com](mailto:rhickmott@smithfree.com)>  
**Subject:** RE: December Meeting Request

Hi Bob,

It looks like Janet McCabe and Joe Goffman could fit in an hour meeting on Tuesday, December 1 at 1:30pm. Let me know if this could work on your end.



Thanks.

Emily

Emily Atkinson  
Staff Assistant

Immediate Office of the Acting Assistant Administrator  
Office of Air and Radiation, USEPA  
Room 5406B, 1200 Pennsylvania Avenue NW  
Washington, DC 20460  
Voice: 202-564-1850  
Email: [atkinson.emily@epa.gov](mailto:atkinson.emily@epa.gov)

**To:** Bob Hickmott[rhickmott@smithfree.com]  
**Cc:** Reeder, John[Reeder.John@epa.gov]; Atkinson, Emily[Atkinson.Emily@epa.gov]; Stewart, Lori[Stewart.Lori@epa.gov]; Browne, Cynthia[Browne.Cynthia@epa.gov]  
**From:** Goffman, Joseph  
**Sent:** Tue 11/17/2015 3:55:23 PM  
**Subject:** RE: December Meeting Request

Good to hear from you, Bob. We will work on setting something up. Thanks.

**From:** Bob Hickmott [mailto:rhickmott@smithfree.com]  
**Sent:** Tuesday, November 17, 2015 10:43 AM  
**To:** Goffman, Joseph <Goffman.Joseph@epa.gov>  
**Cc:** Reeder, John <Reeder.John@epa.gov>  
**Subject:** December Meeting Request

Joe –

It would be nice to see you in a non-Congressional hearing venue!

I would like to set up a meeting with you, Janet, and the appropriate team for my client Anadarko to discuss proposed regulations on methane, OOOO, CTG, and source determination. While no doubt you have heard from the industry trade associations, Anadarko does have first-hand experience in working the regulatory guidelines in Colorado and would like to share their insights.

They have been a part of a larger group, I believe, that has met with the RTP staff at OAQPS. At my suggestion, they have also interacted with the Region 8 office and they found that to be a positive exchange of information. They are reaching out to the Region 6 office as well.

We would welcome the opportunity to share our perspective on these proposed rules and have a group of no more than five to meet for this discussion. Would you please look at the possibility of such a meeting at OAR on December 1st or 2<sup>nd</sup> at your offices.

Many thanks,

Bob Hickmott

The Smith-Free Group

202/626-6116

**To:** Moss, Jacob[Jacob.Moss@sen.ca.gov]  
**Cc:** Broome, Bart[Bart.Broome@sen.ca.gov]; Cozzie, David[Cozzie.David@epa.gov]; Maier, Brent[Maier.Brent@epa.gov]; Jordan, Deborah[Jordan.Deborah@epa.gov]  
**From:** Terry, Sara  
**Sent:** Tue 4/12/2016 7:16:34 PM  
**Subject:** RE: SB 1441 (Leno) Reducing Fugitive Emissions of Natural Gas

Here is the link to the web pages David referenced:

Oil and Gas Regulatory Actions: <https://www3.epa.gov/airquality/oilandgas/actions.html>

Methane Challenge Program: <https://www3.epa.gov/gasstar/methanechallenge/>

Sara

**From:** Moss, Jacob [mailto:Jacob.Moss@sen.ca.gov]  
**Sent:** Tuesday, April 12, 2016 12:08 PM  
**To:** Terry, Sara <Terry.Sara@epa.gov>  
**Cc:** Broome, Bart <Bart.Broome@sen.ca.gov>; Cozzie, David <Cozzie.David@epa.gov>; Maier, Brent <Maier.Brent@epa.gov>; Jordan, Deborah <Jordan.Deborah@epa.gov>  
**Subject:** Re: SB 1441 (Leno) Reducing Fugitive Emissions of Natural Gas

Hi Sara,

Today at 3 works great.

**Jacob Moss**

Legislative Assistant

Senator Mark Leno

California State Senate, D-11

State Capitol, Room 5100, [Sacramento, CA 95814](#)

office: [\(916\) 651-4011](tel:(916)651-4011) | fax: [\(916\) 651-4911](tel:(916)651-4911)

direct: (916) 651-4548 | cell: (916) 548-0121

[www.senate.ca.gov/leno](http://www.senate.ca.gov/leno) | [jacob.moss@sen.ca.gov](mailto:jacob.moss@sen.ca.gov)

On Apr 12, 2016, at 8:45 AM, Terry, Sara <[Terry.Sara@epa.gov](mailto:Terry.Sara@epa.gov)> wrote:

Jacob,

I am following up to arrange a time to talk about this issue, with David Cozzie here at EPA's Office of Air Quality Planning and Standards. Brent Maier of our San Francisco office will join us as well. Right now, available times are as follows.

Today at 3:00 or 3:30 EDT/12:00 or 12:30 PDT

Wednesday at 4:00 EDT/1:00 PDT

Thursday 3:30 EDT/12:30 PDT

Please let me know if one of these time works for you.

Thanks,

Sara

To: 'airstar0077@gmail.com'[airstar0077@gmail.com];  
 'amanda.l.davis@tn.gov'[amanda.l.davis@tn.gov]; 'ASadar@achd.net'[ASadar@achd.net];  
 'avickers@marama.org'[avickers@marama.org]; Beeler, Cindy[Beeler.Cindy@epa.gov];  
 'brett.davis@wyo.gov'[brett.davis@wyo.gov]; 'brian.bohlmann@wyo.gov'[brian.bohlmann@wyo.gov];  
 'buzz.asselmeier@illinois.gov'[buzz.asselmeier@illinois.gov];  
 'Byeong.Kim@dnr.state.ga.us'[Byeong.Kim@dnr.state.ga.us]; Schroeder,  
 Carrie[carrie.schroeder@deq.ok.gov]; Garbe, William (Cooper)[Cooper.Garbe@deq.ok.gov]; Cozzie,  
 David[Cozzie.David@epa.gov]; 'curtis.taipale@state.co.us'[curtis.taipale@state.co.us];  
 'cwoods@csg.org'[cwoods@csg.org]; 'dale.wells@state.co.us'[dale.wells@state.co.us];  
 'DALEBOUTR@michigan.gov'[DALEBOUTR@michigan.gov];  
 'darla.potter@wyo.gov'[darla.potter@wyo.gov]; Dewees, Jason[Dewees.Jason@epa.gov];  
 djohnson@westar.org[djohnson@westar.org]; 'ektrythall@nd.gov'[ektrythall@nd.gov];  
 'Erica.Fetty@epa.state.oh.us'[Erica.Fetty@epa.state.oh.us]; 'fcook@blm.gov'[fcook@blm.gov];  
 'gabrielle.petron@noaa.gov'[gabrielle.petron@noaa.gov];  
 'gary.reinbold@deq.idaho.gov'[gary.reinbold@deq.idaho.gov]; Glover, Ed[Glover.Ed@epa.gov];  
 'greg.lauderdale@tceq.texas.gov'[greg.lauderdale@tceq.texas.gov];  
 'heather.sands@ncdenr.gov'[heather.sands@ncdenr.gov];  
 'Holly.Ferguson@tceq.texas.gov'[Holly.Ferguson@tceq.texas.gov]; Hosford,  
 Chip[hosford.chip@epa.gov]; Houyoux, Marc[Houyoux.Marc@epa.gov];  
 'janssen@ladco.org'[janssen@ladco.org]; 'Jim.Price@tceq.texas.gov'[Jim.Price@tceq.texas.gov];  
 'JMCDILL@marama.org'[JMCDILL@marama.org]; Kalfas, Joshua L.[Joshua.Kalfas@deq.ok.gov];  
 'jsemerad@nd.gov'[jsemerad@nd.gov]; Kaleri, Cynthia[kaleri.cynthia@epa.gov];  
 'Kathy.Pendleton@tceq.texas.gov'[Kathy.Pendleton@tceq.texas.gov]; 'kgee@pa.gov'[kgee@pa.gov];  
 Koerber, Mike[Koerber.Mike@epa.gov]; 'LDeahl@kdheks.gov'[LDeahl@kdheks.gov];  
 'lisa.ehrhart@deq.virginia.gov'[lisa.ehrhart@deq.virginia.gov]; Lundelius,  
 Diana[Lundelius.Diana@epa.gov]; Macpherson, Alex[Macpherson.Alex@epa.gov];  
 mark.jones@state.nm.us[mark.jones@state.nm.us];  
 'Mark.McMillan@dphe.state.co.us'[Mark.McMillan@dphe.state.co.us]; Mason,  
 Rich[Mason.Rich@epa.gov]; 'masond1@michigan.gov'[masond1@michigan.gov]; McKittrick,  
 Alexis[McKittrick.Alexis@epa.gov];  
 michael.abraczinskas@ncdenr.gov[michael.abraczinskas@ncdenr.gov];  
 'Michael.Ege@tceq.texas.gov'[Michael.Ege@tceq.texas.gov];  
 'michael.trahiotis@ct.gov'[michael.trahiotis@ct.gov]; 'mike.pring@erg.com'[mike.pring@erg.com];  
 'mike.schneider@state.nm.us'[mike.schneider@state.nm.us]; Moore, Bruce[Moore.Bruce@epa.gov];  
 Nam, Ed[nam.ed@epa.gov]; 'Nicholle.Worland@dep.state.nj.us'[Nicholle.Worland@dep.state.nj.us];  
 'oppapage@gw.dec.state.ny.us'[oppapage@gw.dec.state.ny.us]; Page, Steve[Page.Steve@epa.gov];  
 'patricia\_f\_brewer@nps.gov'[patricia\_f\_brewer@nps.gov];  
 'pbarickman@utah.gov'[pbarickman@utah.gov];  
 'Rachel.Melton@tceq.texas.gov'[Rachel.Melton@tceq.texas.gov];  
 'Ray.Papalski@dep.state.nj.us'[Ray.Papalski@dep.state.nj.us];  
 'Regi.Oommen@erg.com'[Regi.Oommen@erg.com]; Riddick, Lee[Riddick.Lee@epa.gov];  
 'Robert.J.Betterton@wv.gov'[Robert.J.Betterton@wv.gov]; 'rsmartin@nd.gov'[rsmartin@nd.gov];  
 'sbogart@pa.gov'[sbogart@pa.gov]; Schell, Bob[Schell.Bob@epa.gov]; Shores,  
 Richard[Shores.Richard@epa.gov]; Snyder, Jennifer[Snyder.Jennifer@epa.gov];  
 sushma.masemore@ncdenr.gov[sushma.masemore@ncdenr.gov];  
 'szelinka@arb.ca.gov'[szelinka@arb.ca.gov]; 'tcfoster@deq.virginia.gov'[tcfoster@deq.virginia.gov]; Terry,  
 Sara[Terry.Sara@epa.gov]; Thoma, Eben[Thoma.Eben@epa.gov];  
 'tmoore@westar.org'[tmoore@westar.org]; 'tnguyen@arb.ca.gov'[tnguyen@arb.ca.gov]; Richardson,  
 Thomas M.[Tom.Richardson@deq.ok.gov]; 'tom.velalis@epa.state.oh.us'[tom.velalis@epa.state.oh.us];  
 Tonnesen, Gail[Tonnesen.Gail@epa.gov]; Theresa Pella[tpella@censara.org]; Tsirigotis,  
 Peter[Tsirigotis.Peter@epa.gov]; 'tune@adeq.state.ar.us'[tune@adeq.state.ar.us];  
 'twallace@mde.state.md.us'[twallace@mde.state.md.us]; Waltzer, Suzanne[Waltzer.Suzanne@epa.gov];  
 Wayland, Richard[Wayland.Richard@epa.gov]; Weitz, Melissa[Weitz.Melissa@epa.gov];  
 'wilbanmc@dhc.sc.gov'[wilbanmc@dhc.sc.gov]; Witosky, Matthew[Witosky.Matthew@epa.gov];  
 Wortman, Eric[Wortman.Eric@epa.gov]; 'woswald@utah.gov'[woswald@utah.gov]; Young,  
 Carl[young.carl@epa.gov]; Fry, Jessica[fry.jessica@epa.gov]; Smith, James-D[Smith.James-

D@epa.gov]; Wong, Richard[Wong.Richard@epa.gov]; Stackhouse, Debbie[Stackhouse.Debbie@epa.gov]; 'tammy.manning@ncdenr.gov'[tammy.manning@ncdenr.gov]; 'james.r.smith@tn.gov'[james.r.smith@tn.gov]; 'paige.sprague@tceq.texas.gov'[paige.sprague@tceq.texas.gov]; 'sblakely@adem.state.al.us'[sblakely@adem.state.al.us]; 'Milford, Jana (milford@colorado.edu)'[milford@colorado.edu]; 'Shannon Leigh Capps (shannon.capps@colorado.edu)'[shannon.capps@colorado.edu]; Baker, Kirk[Baker.Kirk@epa.gov]; Kleman, Cecelia M.[Cecelia.Kleman@deq.ok.gov]; 'Matt.A.Kemper@wv.gov'[Matt.A.Kemper@wv.gov]; 'Andrew.bollman@ncdenr.gov'[Andrew.bollman@ncdenr.gov]; cindy.heil@alaska.gov[cindy.heil@alaska.gov]; Dresser, Chris[Dresser.Chris@epa.gov]; 'svance@utah.gov'[svance@utah.gov]; Ross, Lindsay A.[Lindsay.Ross@deq.ok.gov]; Chris.Laley@deq.ok.gov[Chris.Laley@deq.ok.gov]; 'Ames,Rodger (Rodger.Ames@ColoState.EDU)'[Rodger.Ames@ColoState.EDU]; 'abrimmer@raqc.org'[abrimmer@raqc.org]; 'gmortensen@utah.gov'[gmortensen@utah.gov]; 'alexis.zubrow@dot.gov'[alexis.zubrow@dot.gov]; 'daniel.bon@state.co.us'[daniel.bon@state.co.us]; 'zgraves@kdheks.gov'[zgraves@kdheks.gov]; 'Anthony.Marchese@colostate.edu'[Anthony.Marchese@colostate.edu]; Hanson, Andrew[Hanson.Andrew@epa.gov]; Gamas, Julia[Gamas.Julia@epa.gov]; 'cmeister@blm.gov'[cmeister@blm.gov]; 'ctuers@blm.gov'[ctuers@blm.gov]; Schwartz, Colin[Schwartz.Colin@epa.gov]; 'Gerry.Baker@iogcc.state.ok.us'[Gerry.Baker@iogcc.state.ok.us]; 'CarolBooth@iogcc.state.ok.us'[CarolBooth@iogcc.state.ok.us]; 'john.clark2@alaska.gov'[john.clark2@alaska.gov]; 'maryuhl@westar.org'[maryuhl@westar.org]; Bin.Z.Schmitz@wv.gov[Bin.Z.Schmitz@wv.gov]; 'arookey@nd.gov'[arookey@nd.gov]; 'Adam.Miller@nd.gov'[Adam.Miller@nd.gov]; 'amalone@ndep.nv.gov'[amalone@ndep.nv.gov]; Mark.Gibbs\_deq.ok.gov[Mark.Gibbs@deq.ok.gov]

**From:** Gibbs, Mark

**Sent:** Tue 2/9/2016 3:32:04 PM

**Subject:** National Oil and Gas Emissions Committee - February 11, 2016 Meeting Agenda

01-14-2016 National Oil and Gas Emissions Committee Call Minutes.docx

National Oil & Gas Emissions Committee - Subpart W Implementation Webinar & Action Items from last week's call

MARAMA 2016\_AnyChang.pptx

You are invited to attend a MARAMA Training Webinar - Oil and Gas Storage Vessels - Thursday March 3 from 1:30-3:00 Eastern

GHGRP Subpart W leak detection method proposal signed

Hi National Oil & Gas Emissions Committee Members:

Attachments to this email:

- [REDACTED] Minutes for the January 2016 meeting
- [REDACTED] Email with action items from the January 2016 meeting
- [REDACTED] Slides for Andy Chang's presentation
- [REDACTED] Email on upcoming MARAMA Training Webinar on Oil & Gas Storage Vessels
- [REDACTED] Email on GHGRP Subpart W leak detection method proposal

Let me know if I missed you from the list of attendees for last month's meeting.

Meeting Time: **2:00 – 3:30 pm** Eastern, February 11, 2016

Call-in number: Ex. 6 - Personal Privacy

Confirmation Number: Ex. 6 - Personal Privacy

1. Approve minutes of the January 2016 meeting
2. Review action items from the January 2016 meeting
3. NOx Emissions from U.S. Shale Plays using an Integrated Top-down and Bottom-up Approach – Andy Chang
4. Update on submitting Oil & Gas emissions for the 2014 NEI (deadline for nonpoint emissions is now February 19, 2016) – Jennifer Snyder
5. State comments on using the Nonpoint Oil & Gas Emissions Estimation Tool to prepare their 2014 NEI submissions
6. Request for input on upcoming study of pneumatic controllers in the Uinta Basin – Cindy Beeler
7. Upcoming MARAMA Training Webinar on Oil & Gas Storage Vessels (Thursday, March 3, 1:30 to 3:00 pm Eastern) – Julie McDill

See attached email and register at

<https://attendee.gotowebinar.com/register/8371500486339365634>

8. GHGRP Subpart W Proposed Rule on Leak Detection Methodology Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems – Alexis McKittrick

See attached email and <http://www.epa.gov/ghgreporting/rulemaking-notice-ghg-reporting>

9. Memos on updates under consideration for Production and Gathering & Boosting in the GHG Inventory – Melissa Weitz

[http://www3.epa.gov/climatechange/ghgemissions/usinventoryreport/DRAFT\\_Proposed\\_Revision\\_to\\_Production\\_and\\_Gathering\\_and\\_Boosting\\_in\\_the\\_GHG\\_Inventory.pdf](http://www3.epa.gov/climatechange/ghgemissions/usinventoryreport/DRAFT_Proposed_Revision_to_Production_and_Gathering_and_Boosting_in_the_GHG_Inventory.pdf)



3-2016.pdf

[http://www3.epa.gov/climatechange/ghgemissions/usinventoryreport/DRAFT\\_Proposed\\_Revision\\_to\\_NG\\_Gathering\\_Segment\\_Emissions\\_2-2-2016.pdf](http://www3.epa.gov/climatechange/ghgemissions/usinventoryreport/DRAFT_Proposed_Revision_to_NG_Gathering_Segment_Emissions_2-2-2016.pdf)

(EPA is seeking stakeholder comments by February 18, 2016 to [ghginventory@epa.gov](mailto:ghginventory@epa.gov))

10. Brief thoughts on future work post-2014 NEI version 1

11. Reminder to submit content for the Oil & Gas Emissions Information Repository  
(<http://vibe.cira.colostate.edu/ogec/home.htm>)

12. Next meeting: Thursday, March 10, 2016 at 2:00 pm – 3:30 pm Eastern, same call in number and confirmation number

Talk to you on Thursday,

Mark

Mark Gibbs

Emission Inventory Manager

Oklahoma DEQ

(405) 702-4179

**National Oil and Gas Emissions Committee**  
**Monthly Meeting Minutes for Thursday, January 14, 2016**

**Attendees**

OAQPS, EPA (Rich Mason, Jennifer Snyder)  
OAP, EPA (Alexis McKittrick, Melissa Weitz)  
R6, EPA (Colin Schwarz, Diana Lundelius)  
BLM (Mary Uhl)  
WRAP/WESTAR (Tom Moore)  
ERG (Regi Oommen, Mike Pring)  
CIRA, CSU (Rodger Ames)  
R2: NY (Ona Papageorgiou)  
R3: PA (Karen Gee), WV (David Fewell), VA (Thomas Foster)  
R4: NC (Andy Bollman)  
R5: MI (Rick Dalebout), OH (Tom Velalis)  
R6: NM (Mike Schneider), OK (Mark Gibbs, Tom Richardson), TX (Michael Ege)  
R8: WY (Brett Davis)

Moderator: Mark Gibbs of OK

1. Approve minutes of the December 2015 meeting
2. Update on submitting Oil & Gas emissions for the 2014 NEI (deadline for nonpoint emissions is now February 19, 2016) – Jennifer Snyder, EPA
3. Applying Subpart W Reporting Information in the Greater San Juan Basin O&G Emission Inventory – Tom Moore, WESTAR/WRAP
4. State reviews of EPA's Nonpoint Oil & Gas Emissions Estimation Tool for the 2014 NEI
5. Discussion of the effects of including Subpart W data in the 2014 tool
6. Recent Stakeholder Workshop on EPA GHG Data on Petroleum and Natural Gas Systems:  
Presentation slides now available at  
<http://www3.epa.gov/climatechange/ghgemissions/Nov2015Workshop.html>
7. Reminder to submit content for the Oil & Gas Emissions Information Repository  
(<http://vibe.cira.colostate.edu/ogec/home.htm>)
8. Next meeting: Thursday, February 11, 2016 at 2:00 pm – 3:30 pm Eastern, same call in number and confirmation number

The minutes from the December 2015 meeting were approved without comment.

Jennifer Snyder gave an update on deadlines for the NEI. The nonpoint deadline is February 19<sup>th</sup>, 2016. Several states have contacted her to get assistance with the Tool. If you are having trouble or need more time please contact Jennifer. If a state has not made any submission, EPA will run the Tool to generate emissions for that state as a backup. If a state is not comfortable running the whole tool and only needs to apply simple revision they are encouraged to contact Jennifer. EPA won't be running the tool on its own until after the submission deadline. Jennifer can accept O&G submissions through March. States are strongly encouraged to contact Jennifer if they need extra time.

Regi Oommen asked if the point sources have already been submitted to EPA. Jennifer said they are due tomorrow [1/15/2016] by 5:00 pm. Regi said this is a good opportunity for states to look at their point sources and see if they need to do a point source subtraction. The point sources can

be added up by their SCC's. Regi has been working with Oklahoma on subtracting their point source activity.

Mark Gibbs said that in Oklahoma they have around 6000 wells that are now inventoried as point sources, but they are not submitted as such to the NEI. In general point sources in the NEI are the very largest (i.e., Title V) sources. Oklahoma has also submitted their minor and synthetic minor midstream compressor stations and gas plants as point sources. They submitted those because they believe it is important to have a comprehensive representation of the whole oil and gas sector. Tom Moore has previously talked of the need to better capture midstream sources. In Oklahoma, the wellhead point sources will be aggregated with the (point-source subtracted) results from the Tool to derive total county area SCC estimates. In Wyoming, they inventory all their wells and then roll up all this data into the area SCCs. Jennifer Snyder clarified that if a state has already submitted Oil and Gas emissions, EPA will not replace these with Tool estimates.

Julie McDill asked, when Oklahoma submits by area sources are they doing this by county? Mark said yes. Julie also asked if a state doesn't submit a complete inventory does the EPA supplement pollutants? Jennifer said she didn't know and would be something she would look into.

Tom Moore gave a presentation on Subpart W reporting in the greater San Juan Basin. Three tribes have substantial oil and gas production on tribal lands. The State of Colorado does not permit many midstream facilities in this basin compared to New Mexico. Surveys were used to gather data. Most operators chose to submit Subpart W calculation tables to WESTAR-WRAP as long as they were kept confidential. Additional information on engines, truck loading, etc., was requested to supplement the GHGRP data. Most of the larger operators have submitted survey responses and represent a significant proportion of activity and emissions in the basin.

Tom was asked if he had received a lot of gas composition data with the surveys. Tom said he didn't know but he could look into it. In previous surveys, they have had good luck in some basins but in other basins the sample size of gas compositions was wasn't large enough to be representative.

Mark Gibbs asked Tom when he started the survey was he hoping to get everything from Subpart W or did they always know they would need additional information? Tom said they knew they would need surveys for the engines and certain other source types. Mostly though, the Subpart W was very helpful for the GHG and VOC side of things. The operators told them they would not fill out a full survey so they sent the operators the Subpart W data request. A couple of important producing companies had major staffing changes and so they are now having to go back and do some additional mining of the actual Subpart W reported data.

Mark Gibbs asked if Tom had to get the Subpart W supporting calculations from the operators. Tom said this was correct, most were willing to respond provided it was kept confidential. Mark also asked if the survey data for the engines was comprehensive. Tom said the survey did give a good view of the engine distributions in the basin.

The Subpart W coverage of this basin is around 80-90% of total production. Mark asked if in

this basin there were mostly larger companies as opposed to mom and pop operations. Mary Uhl said this was correct; the basin is dominated by Conoco Phillips. Tom said that besides a few companies not responding at all, the Subpart W was helpful, particularly by asking companies for their calculation databases in a proprietary way.

Mike Schneider added that New Mexico has been collecting GHG data from larger sources from 2008, preceding the federal rule. This may have helped lay the ground work in terms of getting information for this basin in a timely matter.

Next on the agenda was discussing what states have found while reviewing the Oil and Gas Tool. Julie McDill said she had some trouble at first, but with help from Regi Oommen was able to access the data. In Pennsylvania they will be doing specialized runs for conventional vs. unconventional wells. She noticed most pollutants were relatively stable with the exception of VOCs, especially notable for condensate and oil tanks. She says this would be a good place to focus attention on why Subpart W activity data affects states differently. The SCC 2310010200 (oil well tanks/flashing, working and breathing) has a lot of change compared to an earlier version of the tool.

Mark encouraged the states to look at the spreadsheet compiled by ERG. He asked how Pennsylvania will approach the multiple Tool runs. Will they aggregate by county? Julie said yes they will and then they provide a county by SCC and pollutant spreadsheet to EPA. Sherry Bogart worked on this process last time.

Oklahoma will be aggregating wellhead point sources with the Tool area emissions. This requires a point to area SCC crosswalk. Julie added the SCCs work better when they run from most general to more specific. In oil and gas it doesn't necessarily run this way. Mark Gibbs agreed and believes the SCCs and area-point crosswalk for this sector need a thorough review. Julie is concerned about grouping flashing losses with working and breathing losses. She believes that this would be another item to look into.

Michigan sent their activity data to their oil and gas commission colleagues. Rick Dalebout said they are still looking into the data. Julie added that it takes a while to dig into the data in the tool and she highly recommends that states start soon.

Mark Gibbs gave a presentation on how Oklahoma is comparing the new Tool and Subpart W information. They compared production, emissions by source type and statewide emissions estimates for 2011 and 2014. For the activity comparison, they focused on production data. General trends were consistent with known changes in operator strategies. It made sense that the Subpart W total liquids production data should be smaller than the HPDI liquids data. There is a discrepancy where Subpart W shows more liquids production than the HPDI for eight counties. Oklahoma had concerns on how accurately the Subpart W production data is apportioned between counties. Alternatively, how complete is the information available from HPDI?

There is also a concern about the change in the gas to oil ratio used to classify wells as oil or gas. Is this an artifact that is driving the changes in VOC emissions? Mark would like to see a 2014 version with the old well classification to see the difference in emissions.

Julie McDill noted that for pneumatic devices the emission factors are the same for oil and gas wells. She believes they might be able to use this information to see how much of the change is due to the well definition. Mark said it is sometimes hard to see whether there is a change in activity or methodology between 2011 and 2014.

Alexis McKittrick clarified that the NEI team took the Subpart W activity data (e.g., counts of pneumatic devices and heaters) and applied an emission factor to it to then generate VOC and NOx emissions. The GHGRP doesn't collect NOx and VOC emissions data under Subpart W.

Mike Pring said there are a lot of variables going into the changes in Tool emission estimates. The NOx emission factor for heaters was revised downwards. Heater counts were incorporated from Subpart W. These vary by basin and there are 30+ unique values. The national default number dropped by nearly half to 0.36 heaters per well. Storage tank controls were derived from the Subpart W data. Between 2011 and 2014 the OOOO storage tank control requirement came into play. For control oil well storage tanks, the previous default factor was 5% flared whereas the current factor is 50% flared. In North Dakota, based on the WRAP studies, the default was 90% but the Subpart W data showed it to be 85%. He said the counties with Subpart W production data being greater than the HPDI data does seem odd. The detailed spreadsheet for storage tanks that was provided with the Subpart W analyses shows county level production by operator. This could help inform why there are differences.

Julie asked how Mike derived the national default factors. Mike said it was done on a basin level and is explained in ERG's memo on how the Subpart W data was incorporated into the Tool.

Mark asked how ERG got the Subpart W production data to the county level. Mike said that the storage tank category is reported at the sub-basin level. The sub-basin is basically a county cross-referenced with five different formation (well) types.

Ona Papageorgiou said that in New York the oil production pneumatic devices SCC showed a larger number with the Subpart W data than without. Mike said they used GHGRP basin-level data for 116 basins which was applied equally to all counties in those basins. County-level data (i.e., for storage tanks) was rolled up to the basin level. The raw data is in ERG's spreadsheet. One could, in theory, drill down to the county level to use the storage tank data if they had sufficient time.

The slides and a summary report are now available for the recent Stakeholder Workshop on EPA GHG Data on Petroleum and Natural Gas Systems held in Pittsburgh in November 2015.

Melissa Weitz said they have been looking at available data for oil and gas GHG emissions on a segment by segment basis for the National GHG Inventory. A memo has been posted on distribution segment emissions that is open for comment. Shortly, another memo will be posted covering transmission and storage and later on production and gathering and boosting. As memos become available Melissa has been sending out emails to stakeholders and past commenters. She will notify the committee when the production segment memo is available.

Alexis McKittrick said they have added well identification numbers and made other changes to

Subpart W reporting. There will be a webinar next Wednesday [1/20/2016]; details will be forwarded to the committee. The newest rulemaking (covering well numbers) will affect 2016 data, which is reported in 2017. Some earlier targeted changes in Subpart W calculation methods will affect the 2015 reporting done in 2016.

Mark Gibbs made a call for content for the oil and gas emissions information repository, especially for local reports by agencies or industry.

Next call will be Thursday, February 11, 2016 at 2 pm Eastern.

**To:** Mark.Gibbs\_deq.ok.gov[Mark.Gibbs@deq.ok.gov]  
**Cc:** Snyder, Jennifer[Snyder.Jennifer@epa.gov]; Weitz, Melissa[Weitz.Melissa@epa.gov]  
**From:** McKittrick, Alexis  
**Sent:** Fri 1/22/2016 4:52:15 PM  
**Subject:** GHGRP Subpart W leak detection method proposal signed

Hi Mark,

I wanted to give you a heads up that the Administrator signed a targeted GHGRP Subpart W proposed rule yesterday. Here are a few bullets on what it covers:

- Following the proposal of the NSPS subpart OOOOa for the oil and gas industry and the associated leak detection requirements, the EPA is proposing to align the subpart W leak detection methods with those proposed in the NSPS subpart OOOOa action.
- This proposed rule also would add emission factors for leaking equipment to be used in conjunction with these monitoring methods to calculate and report greenhouse gas (GHG) emissions resulting from equipment leaks.
- The proposed new subpart W leak detection method would only be required for those subpart W reporters who are also subject NSPS subpart OOOOa. This reduces burden for reporters that need to comply with both EPA programs.
- The proposed subpart W leak detection methods could be used by other subpart W reporters on a voluntary basis.
- This action would provide flexibility for companies that are undertaking voluntary leak detection activities through participation in Methane Challenge program by allowing them to use subpart W methods and data to show the results of their leak detection programs in their greenhouse gas reporting.

Here is a link to the GHGRP rulemaking page, which provides the full pre-Federal Register publication version of the proposal and the associate Fact Sheet:

<http://www.epa.gov/ghgreporting/rulemaking-notice-ghg-reporting>

This rule will be published in the Federal Register in the coming weeks and will have a 30 day comment period. Please let me know if you all have any questions or would like me to walk through this proposal on our next monthly call.

Take care,

Alexis

Alexis McKittrick, Ph.D.

Climate Change Division

U.S. Environmental Protection Agency

Phone: 202-343-9153

E-mail: [mckittrick.alexis@epa.gov](mailto:mckittrick.alexis@epa.gov)





# **Nitrogen Oxides (NO<sub>x</sub>) Emissions from U.S. Shale Plays using an Integrated Top-down and Bottom-up Approach**

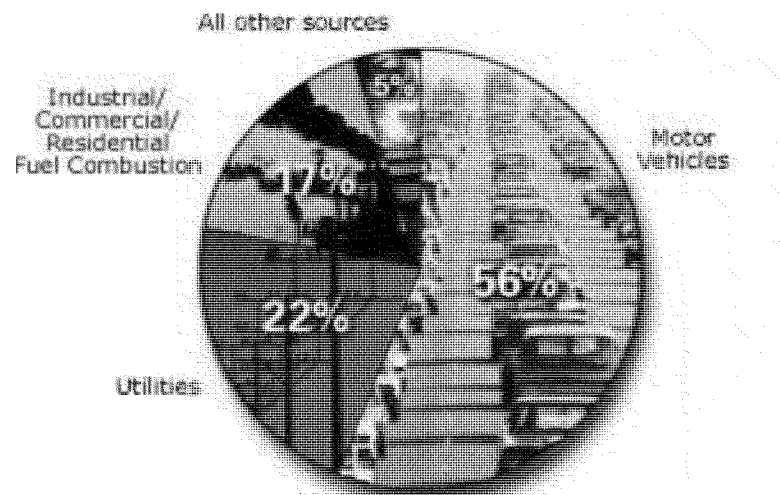
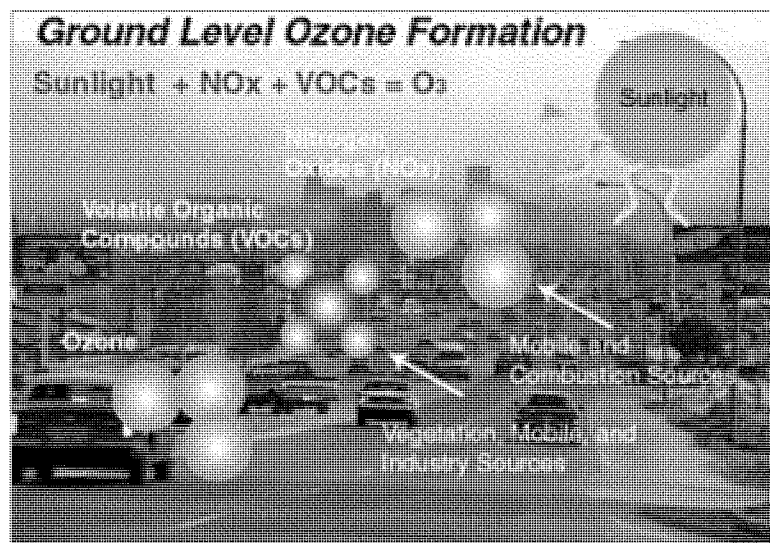
Speaker: Andy Chang, PhD Candidate  
Advisor: Dr. Kuo-Jen Liao

Department of Environmental Engineering  
Texas A&M University-Kingsville



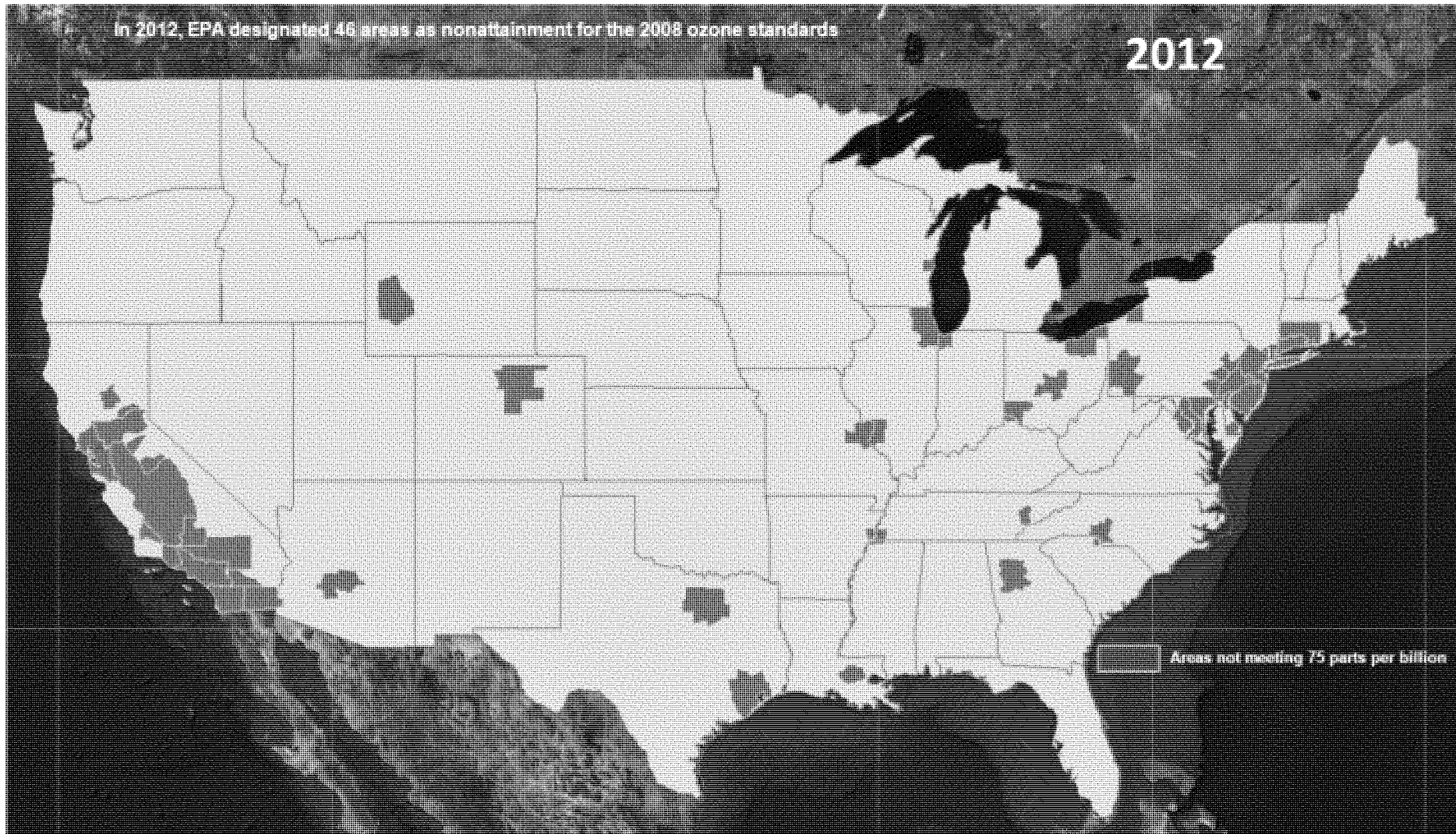
February 11, 2016

# Ground Level Ozone Air Quality

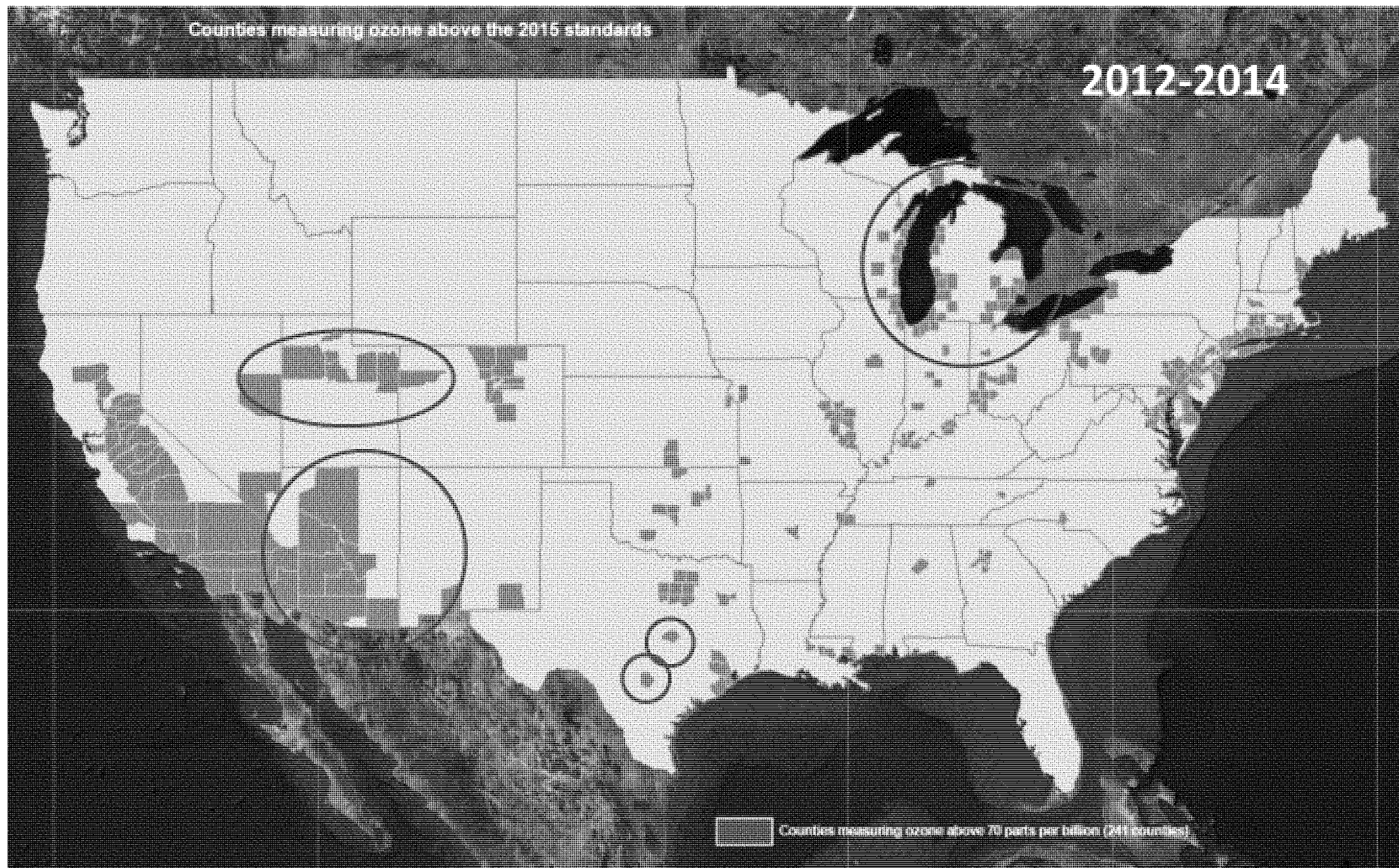


**Sources of NO<sub>x</sub>**  
 Source: US EPA

# Ozone Nonattainment for 2008 Standard (75ppb)



# Ozone Nonattainment for 2015 Standard (70ppb)

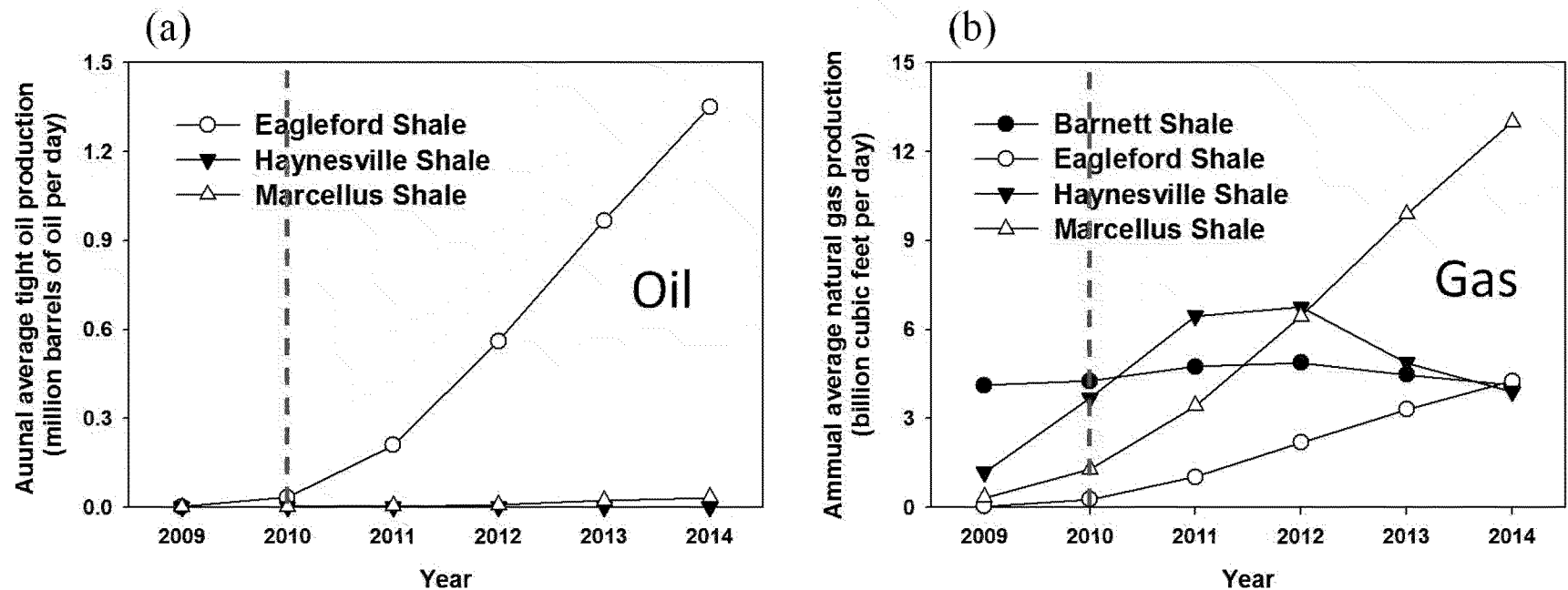


# Introduction

- ❑ Since 2013, the U.S. has become the world's largest producer of tight oil and natural gas from shale rock driven primarily by hydraulic fracturing and horizontal drilling <sup>[1]</sup>.
- ❑ Previous studies show that greenhouse gases (e.g., CH<sub>4</sub>)<sup>[2]</sup>, ozone precursors (e.g., NO<sub>x</sub> and VOCs) <sup>[3,4]</sup> and other hazardous air pollutants (e.g., PM) <sup>[5]</sup> are released from oil and gas-related activities.
- ❑ Unconventional energy production (e.g., shale oil and gas) has flourished in recent years becoming a new source of air pollutant emissions in the U.S.
- ❑ U.S. EPA's national emission inventory (NEI) updates every three years making it inadequate for estimates of air pollutant emissions from shale oil and gas-related activities due to the fast growth of shale oil and gas development.

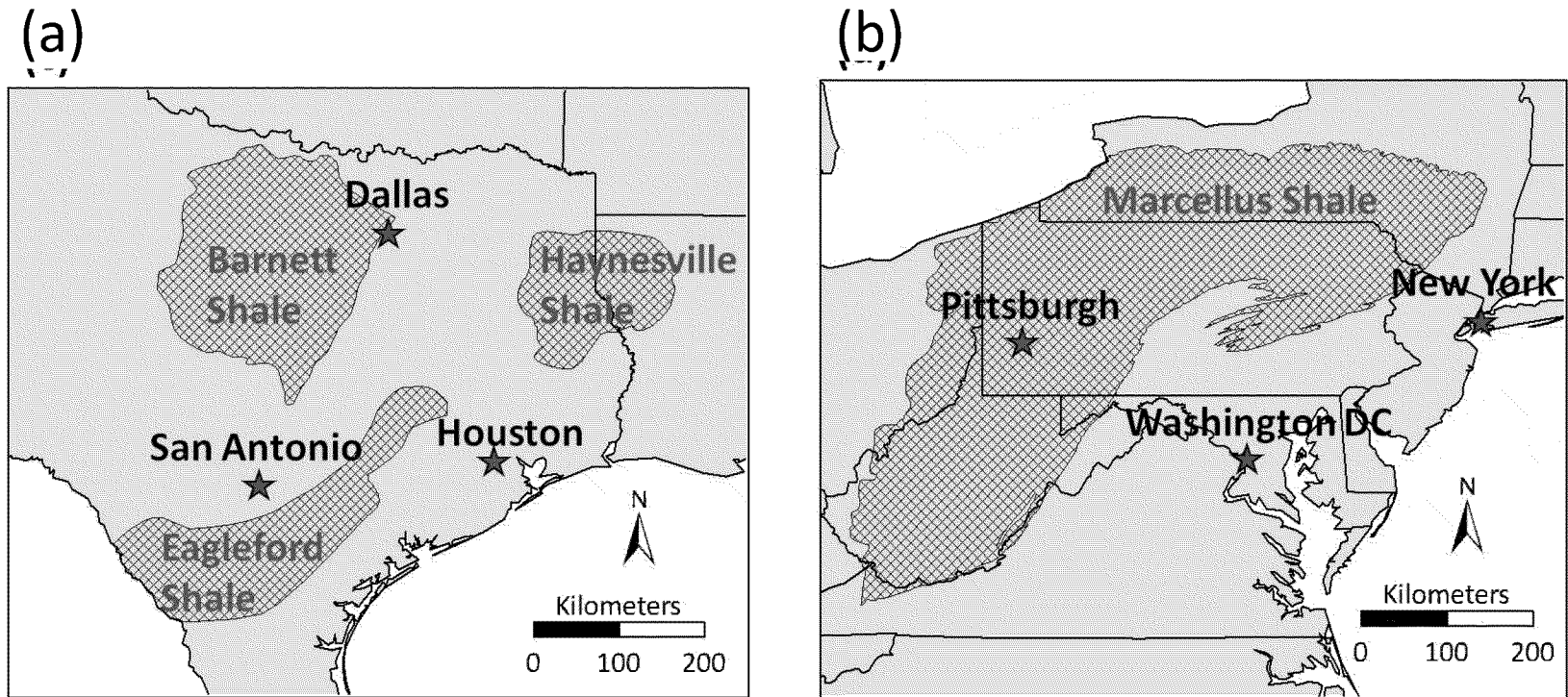
# Objectives

- ❑ To estimate changes in  $\text{NO}_x$  emissions for the Barnett, Eagle Ford, Haynesville and Marcellus Shale in 2011-2014 summertime (i.e., June, July and August) using an integrated bottom-up and top-down approach.



**Figure 1.** (a) Tight oil and (b) natural gas productions in the Barnett, Eagle Ford, Haynesville and Marcellus Shale.



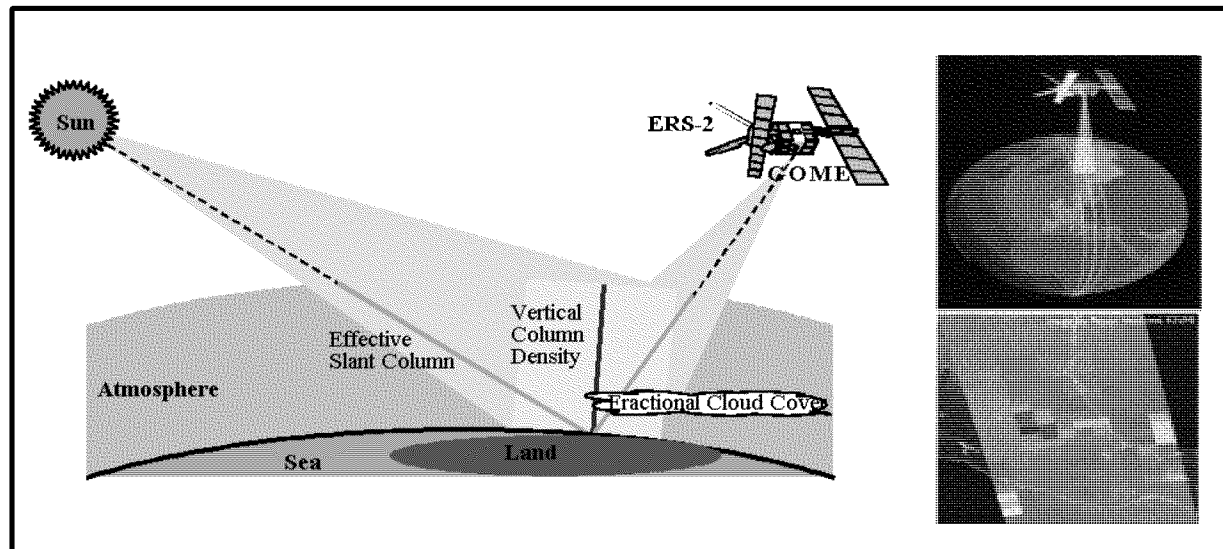


**Figure 2.** Locations of (a) Barnett, Eagle Ford and Haynesville Shale in Texas and (b) Marcellus Shale in Pennsylvania and West Virginia.

# Methods

## ❑ Ozone monitoring Instrument (OMI)

- OMI-retrieved NO<sub>2</sub> column densities were detected at 1:45pm local time at nadir with a spatial resolution of 13×24 km.
- A  $0.125^\circ \times 0.125^\circ$  (14km) grid of OMI's data is analyzed in ArcGIS 10.0.
- OMI-retrieved NO<sub>2</sub> column densities were obtained from the Tropospheric Emission Monitoring Internet Service (TEMIS) (<http://www.temis.nl/index.php>)



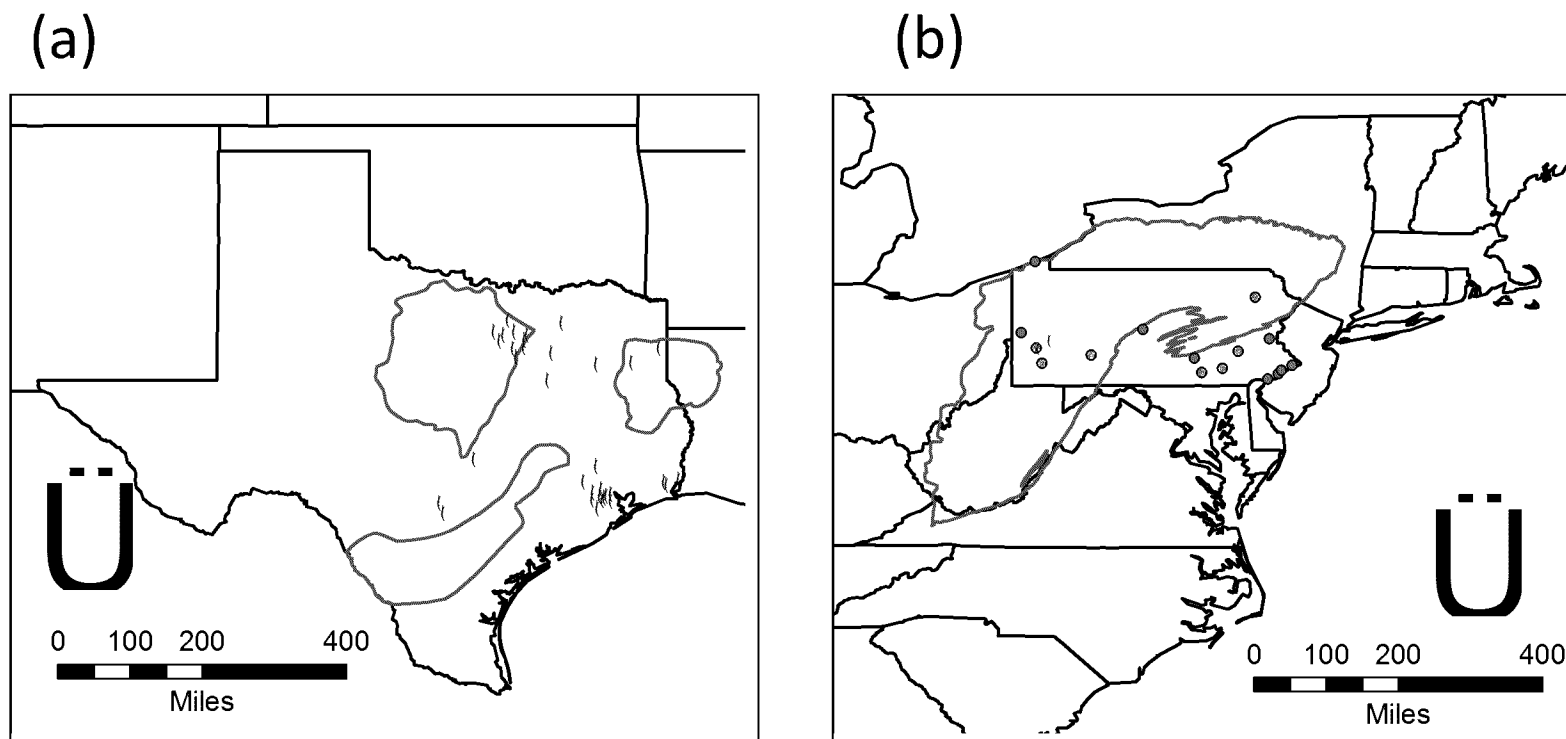
Source: **TEMIS**



# Methods

## □ Ground-level NO<sub>2</sub> concentration

- Summertime average NO<sub>2</sub> concentrations were measured by 34 and 18 monitor sites from AQS in Texas and Pennsylvania in 2010 summer.



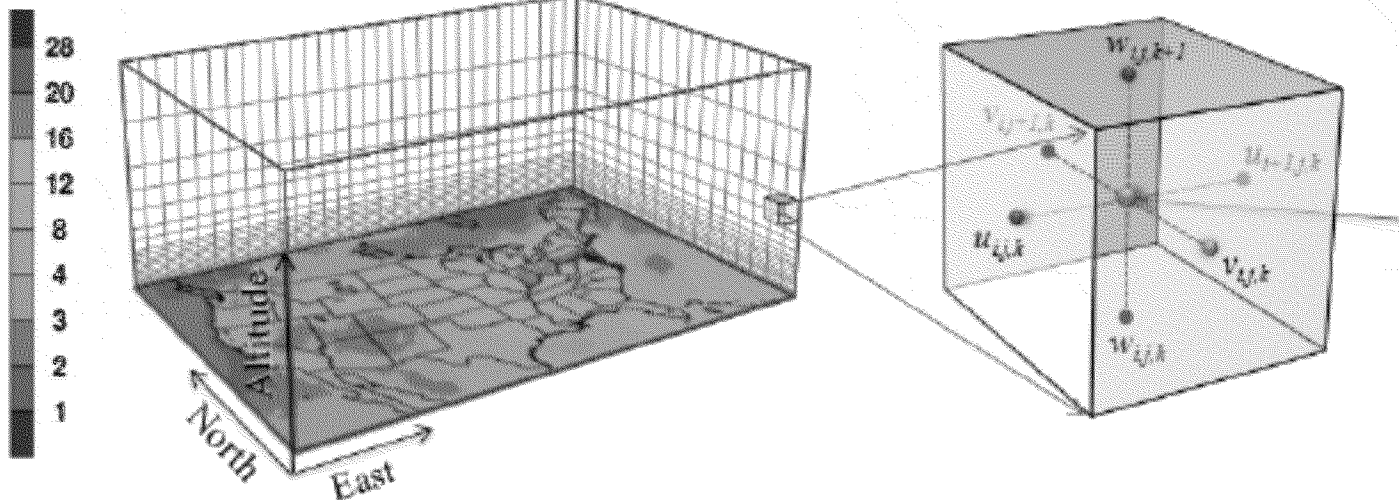
**Figure 3.** Locations of AQS monitor sites in (a) Texas and (b) Pennsylvania.

# Methods

## ❑ NO<sub>x</sub> emissions and the Community Multi-scale Air Quality (CMAQ) Model

- The 2010 NO<sub>x</sub> emission data is obtained from US EPA AQMEII Phase2 (Based on 2008NEI).
- The domain of the model covers the continental U.S. with a horizontal grid of 12km × 12km cell and 22 vertical layers.
- The CB05 gas-phase chemical mechanism with active chlorine chemistry and updated toluene mechanism is applied in the CMAQ. Sixth-generation CMAQ aerosol mechanism is applied as well.

Ozone (unit ppb)



# Methods


- We used a linear regression model in a two-stage method to estimate NO<sub>x</sub> emissions.

**Stage1:** To build up the relationship between ground-level NO<sub>2</sub> concentrations and OMI-retrieved NO<sub>2</sub> columns.

$$C_{\text{NO}_2 \text{ AQS}} = a_1 [\Omega_{\text{NO}_2 \text{ OMI}}] + b_1$$

**Stage2:** To build up the correlation between CMAQ modeled surface NO<sub>2</sub> concentrations and NO<sub>x</sub> emissions.

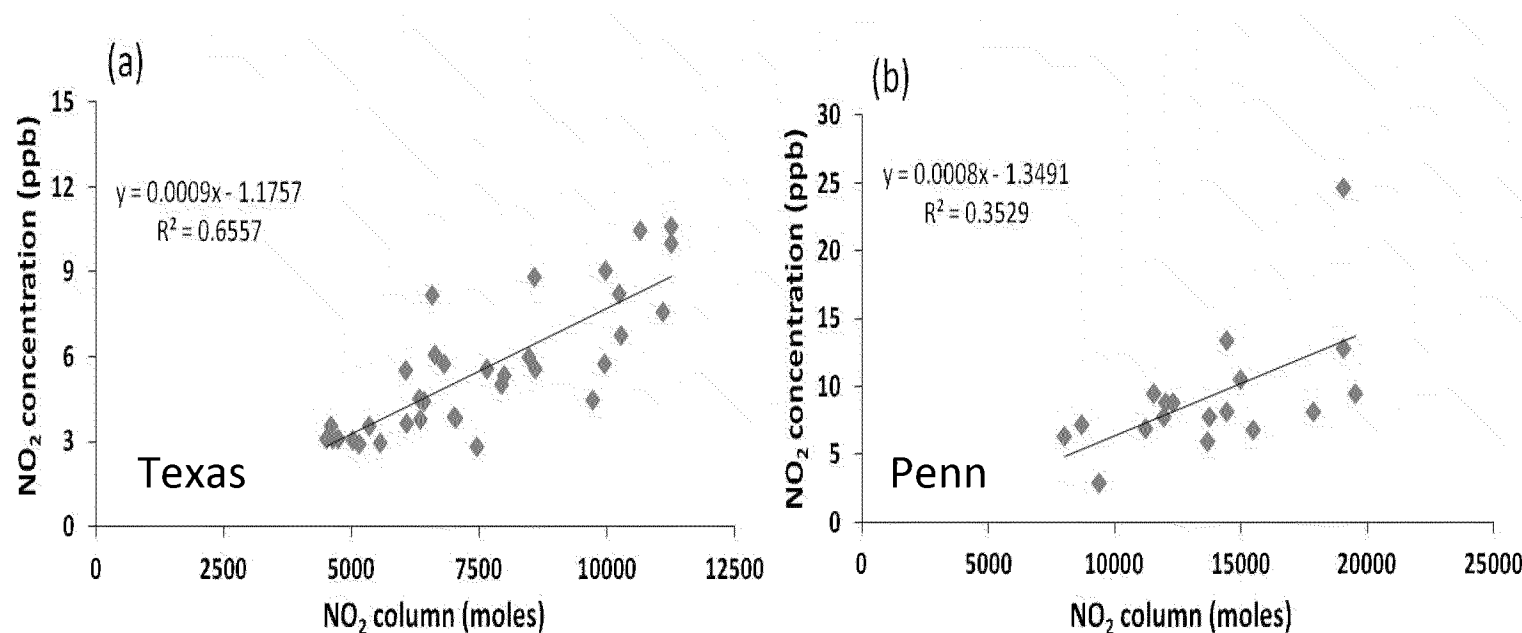
$$C_{\text{NO}_2 \text{ CMAQ}} = a_2 [\text{Emissions}_{\text{NO}_x}] + b_2$$



$$[\text{Emissions}_{\text{NO}_x}] = \frac{a_1 [\Omega_{\text{NO}_2 \text{ OMI}}] + b_1 - b_2}{a_2}$$

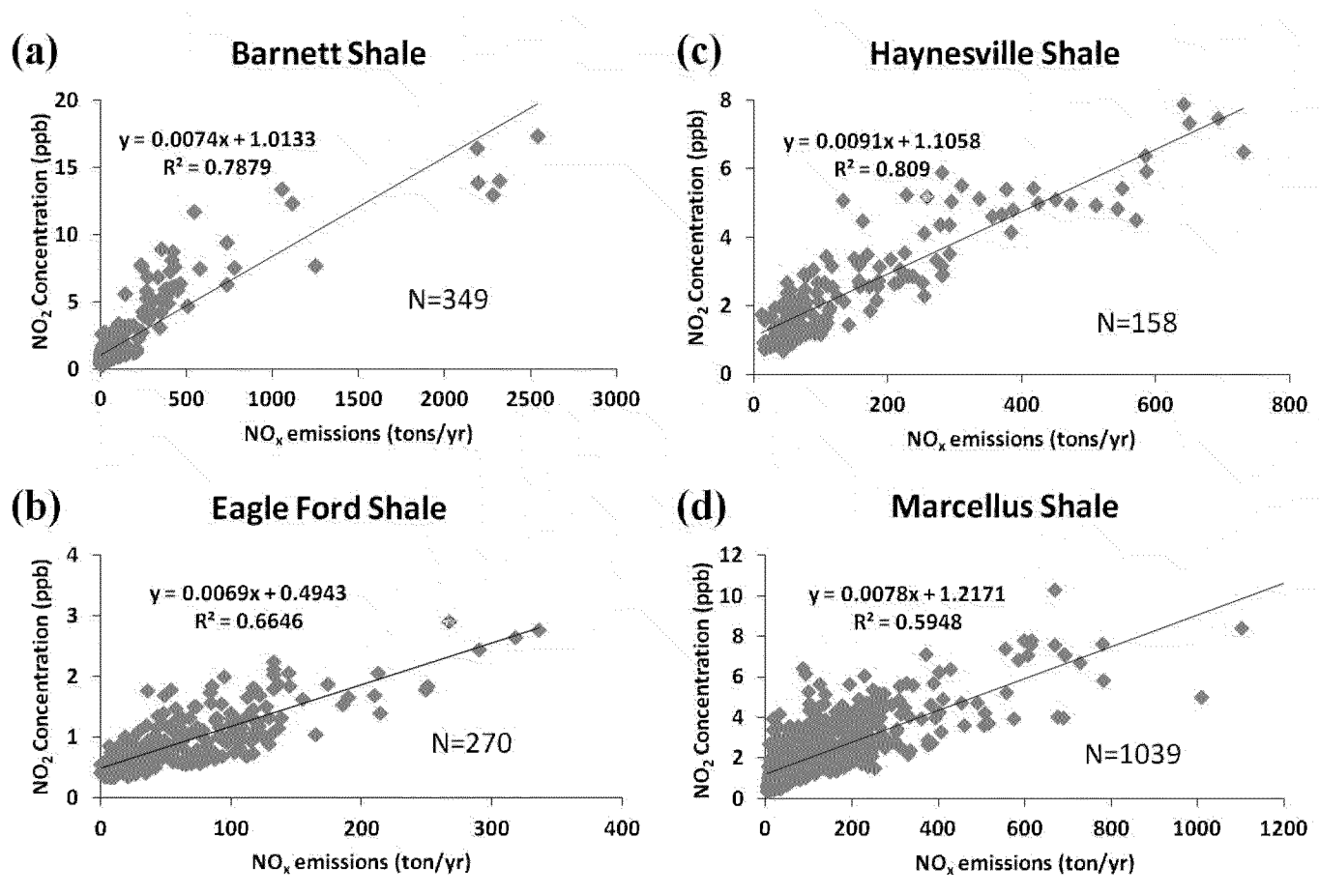
# Results

Stage1: 
$$C_{\text{NO}_2 \text{ AQS}} = a_1 [\Omega_{\text{NO}_2 \text{ OMI}}] + b_1$$



**Figure 4.** Correlation between summertime average  $\text{NO}_2$  concentrations from AQS monitor sites and OMI-retrieved  $\text{NO}_2$  columns at (a) Texas and (b) Pennsylvania in 2010.

$$\text{Results Stage2: } C_{\text{NO}_2 \text{ CMAQ}} = a_2 [\text{Emissions}_{\text{NO}_x}] + b_2$$

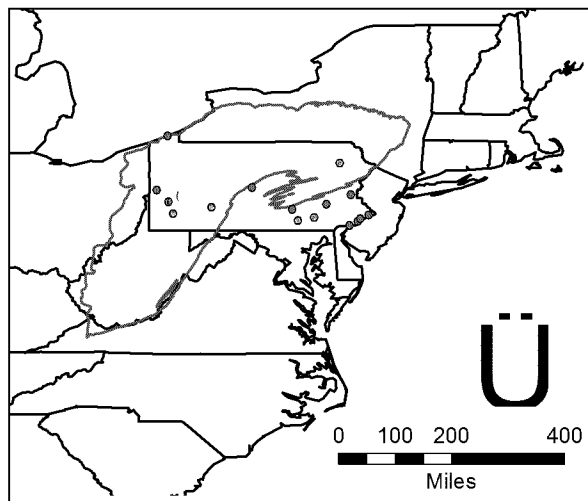
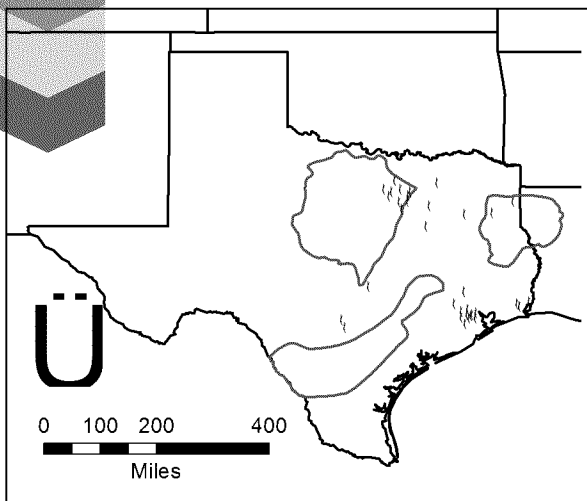


**Figure 5.** Correlation between CMAQ modeled surface  $\text{NO}_2$  concentrations (ppb) and summertime average  $\text{NO}_x$  emissions (tons/yr) for the (a) Barnett, (b) Eagle Ford, (c) Haynesville and (d) Marcellus Shale area. Number of grids (N) for analysis are given for each shale area.

# Results

**Table 1.** Values of slope and intercept in the linear regression model for two steps correlation

	Stage 1			Stage 2		
	$C_{NO_2 \text{ AQS}} = a_1 [\Omega_{NO_2 \text{ OMI}}] + b_1$			$C_{NO_2 \text{ CMAQ}} = a_2 [\text{Emissions}_{NO_x}] + b_2$		
Shale	$a_1$	$b_1$	$R^2$	$a_2$	$b_2$	$R^2$
Barnett	0.0009	-1.176	0.656	0.007	1.013	0.788
Eagle Ford	0.0009	-1.176	0.656	0.007	0.494	0.665
Haynesville	0.0009	-1.176	0.656	0.009	1.106	0.809
Marcellus	0.0008	-1.349	0.353	0.007	1.217	0.595

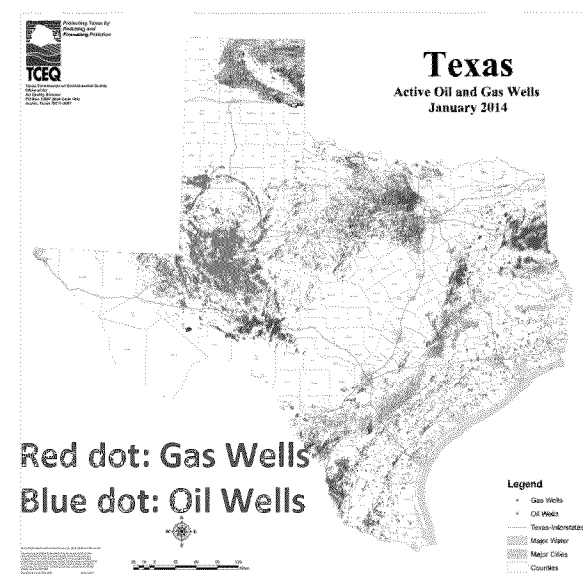
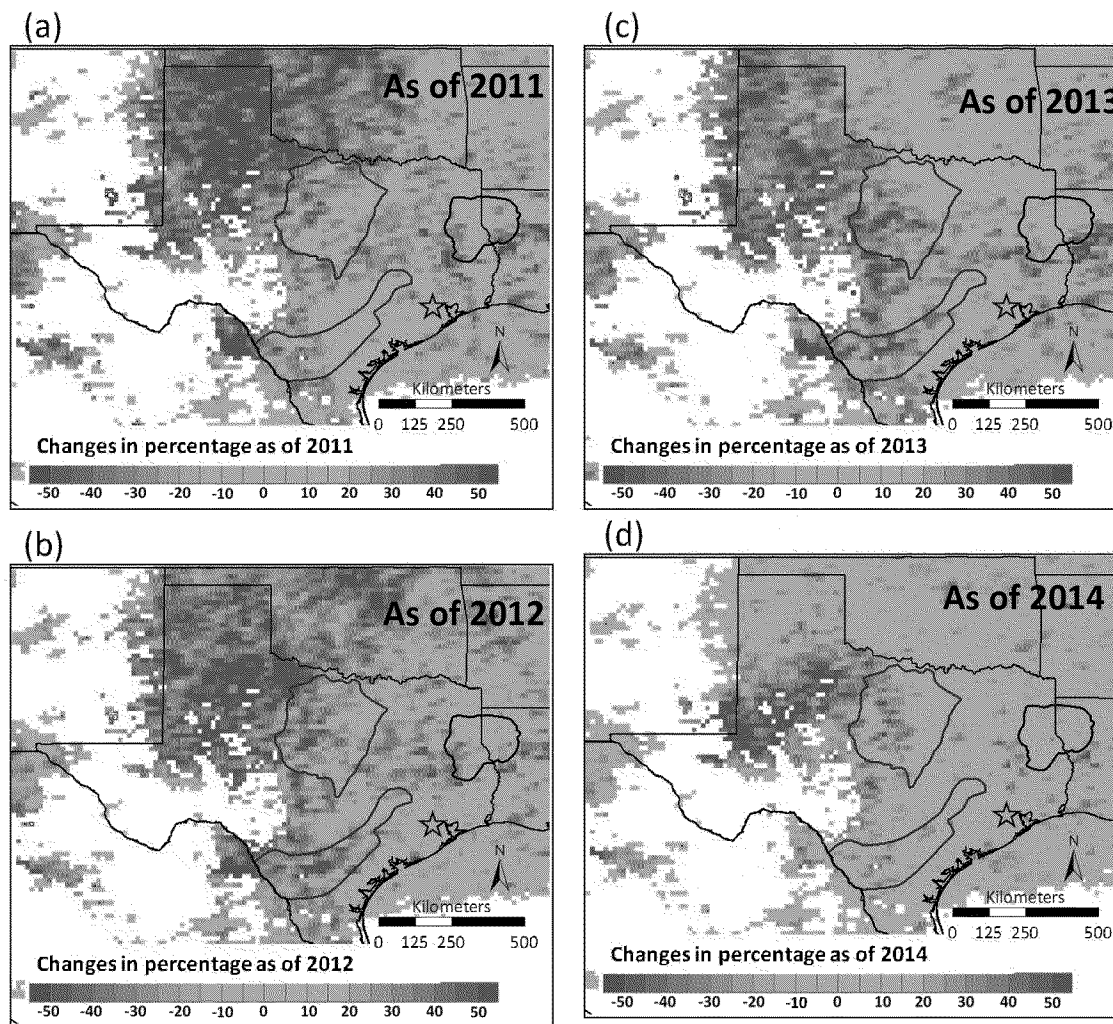


$$[\text{Emissions}_{NO_x}] = \frac{a_1 [\Omega_{NO_2 \text{ OMI}}] + b_1 - b_2}{a_2}$$

# Results

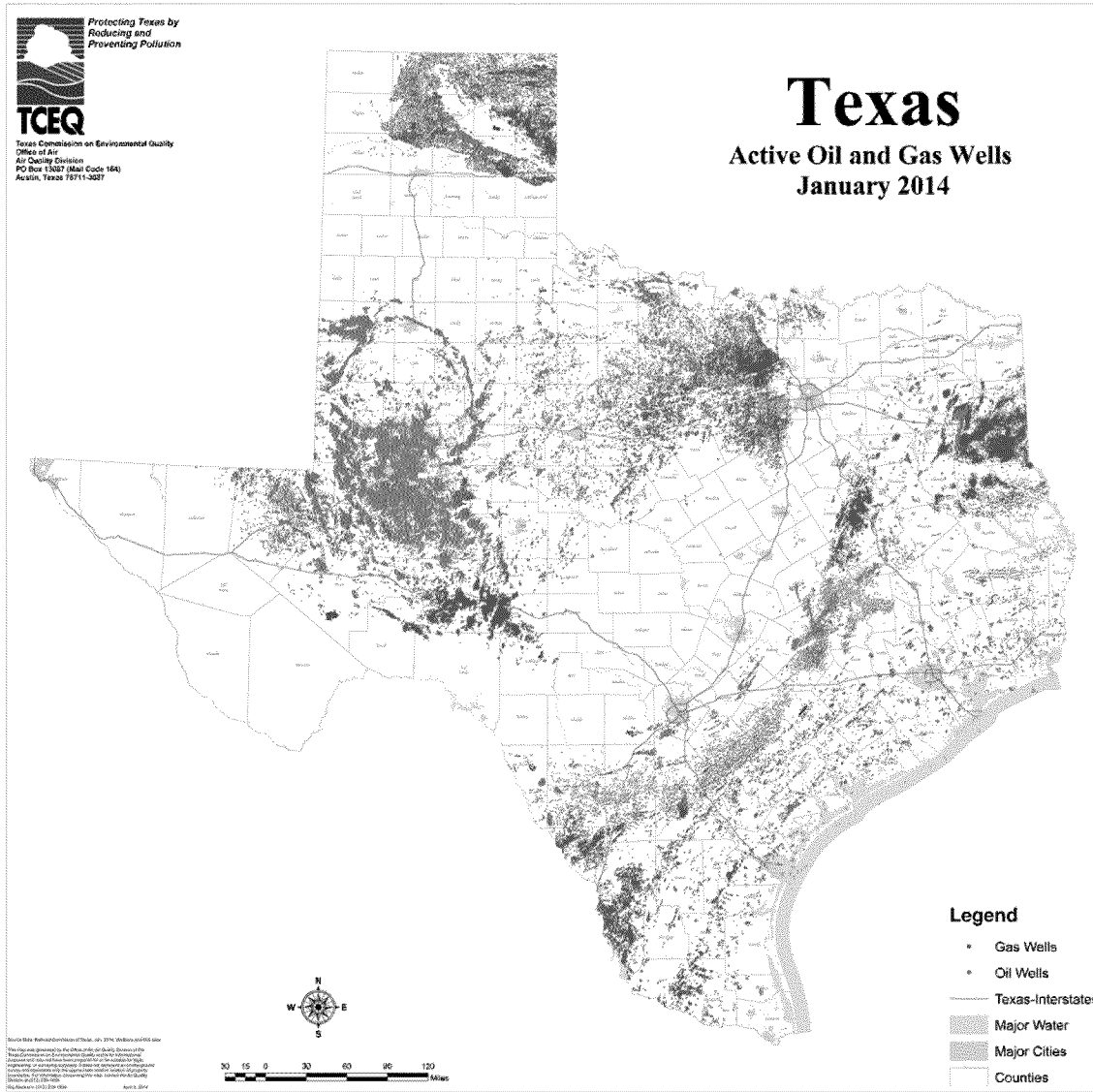
$$\Delta\Omega = \frac{\Omega_i - \Omega_{2010}}{\Omega_{2010}}$$

$i$  (year) =  
2011, 2012, 2013 and 2014



**Figure 6.** Changes in percentage for summertime average OMI-retrieved  $\text{NO}_2$  columns between year 2010 and later years (i.e., 2011, 2012, 2013 and 2014) in Texas (Data in 2010 as a baseline).

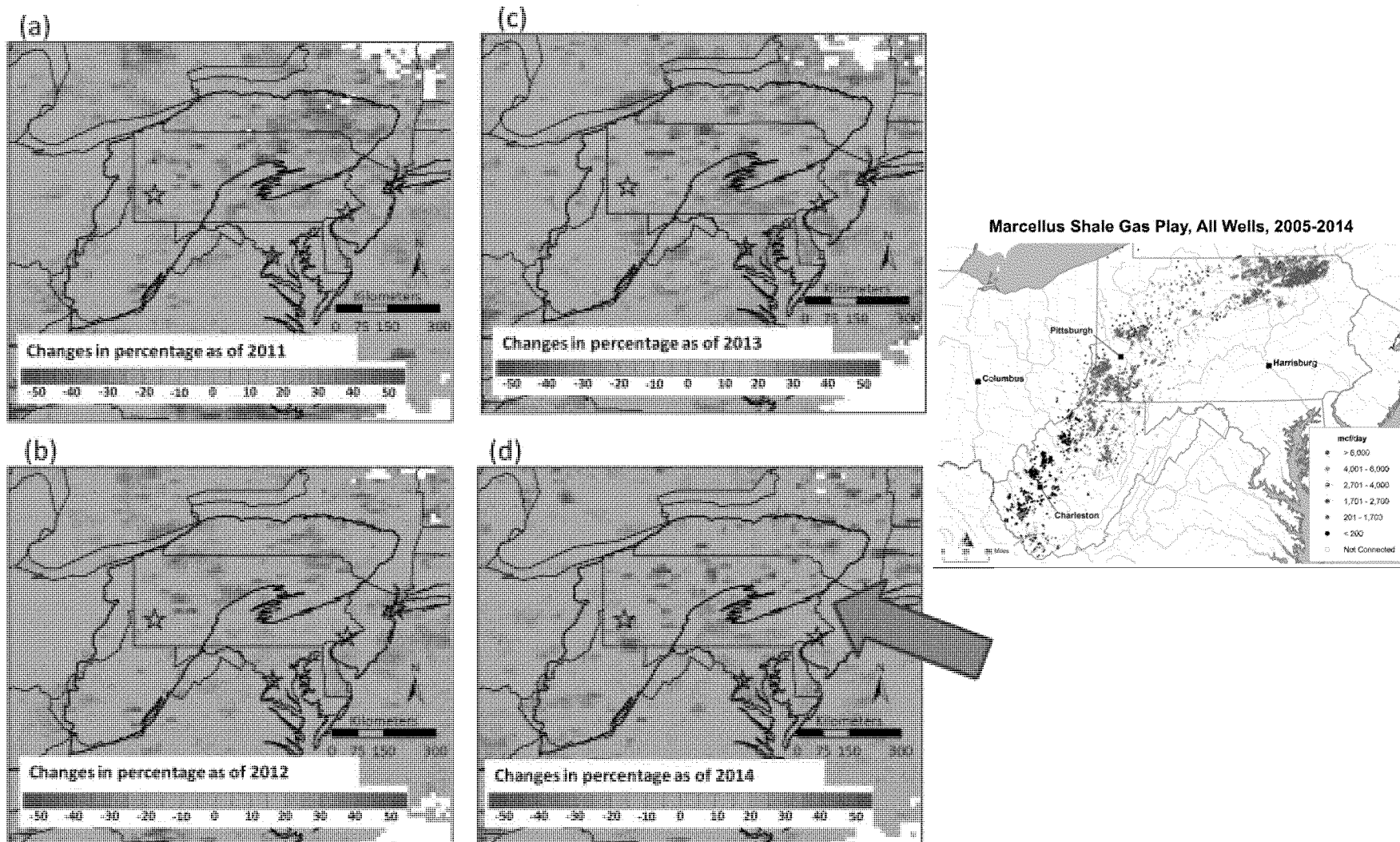
# Locations of Oil and Gas Wells in Texas (as of January 2014)



Source: TCEQ

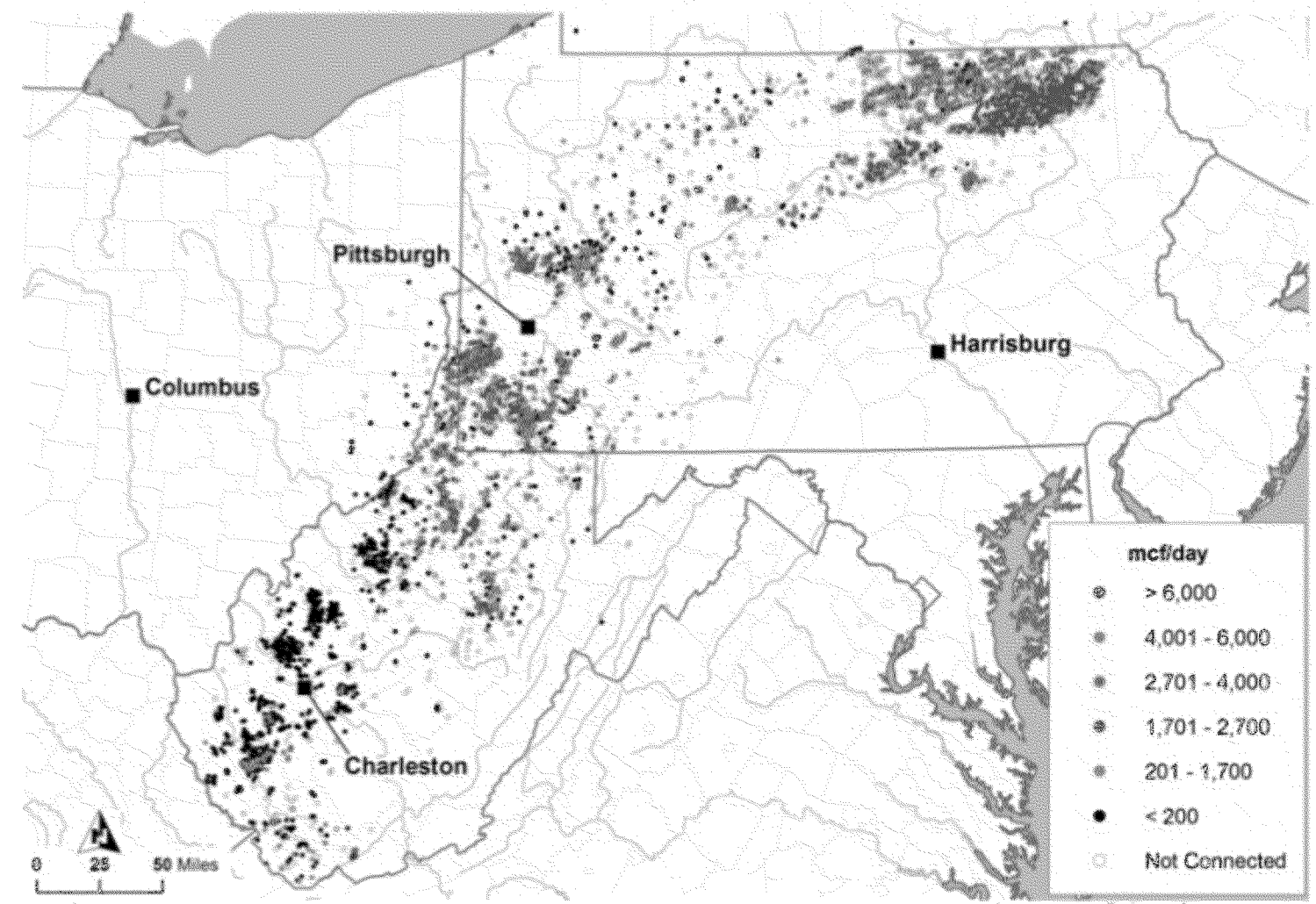


# Results



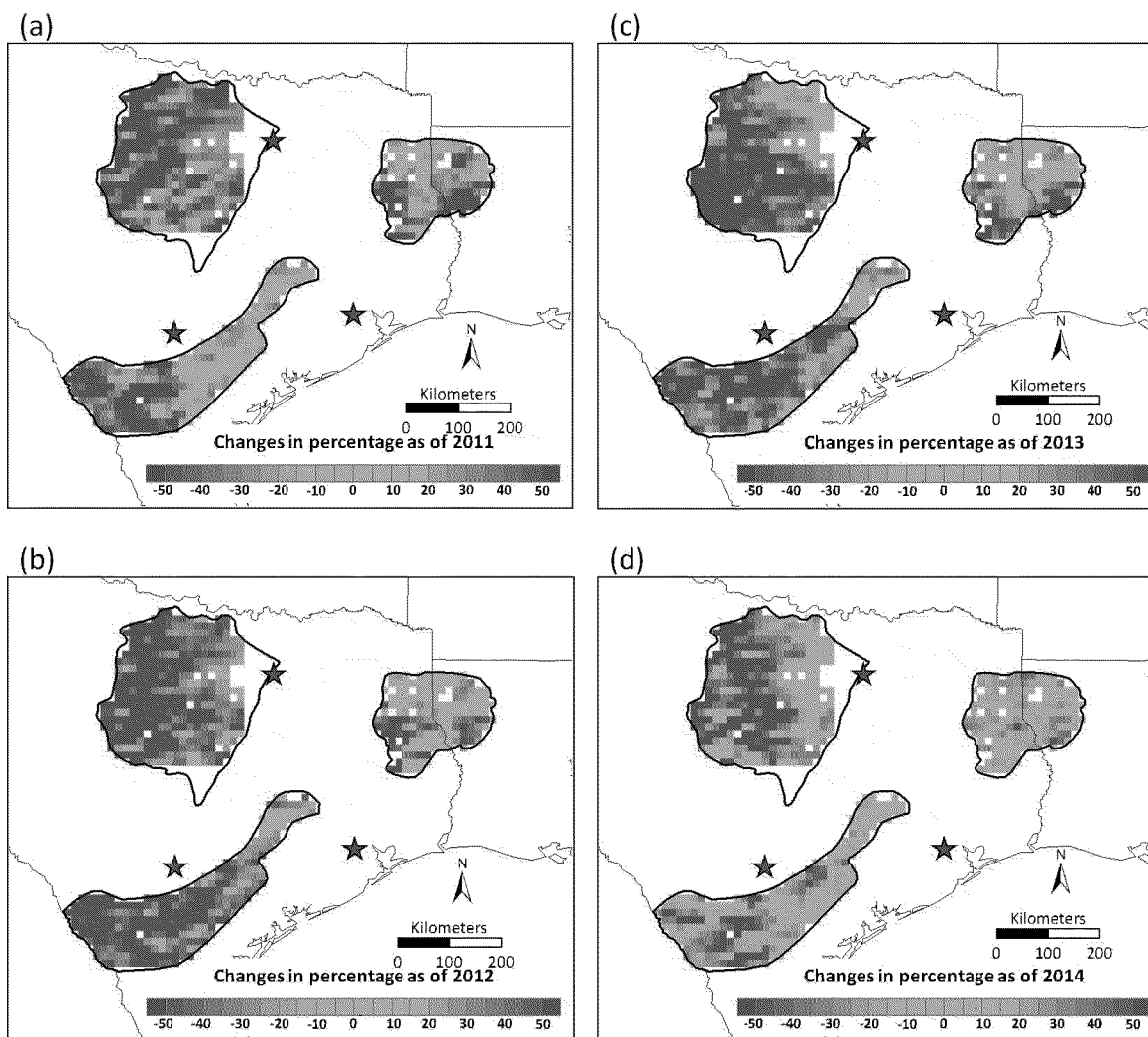
**Figure 7.** Changes in percentage for summertime average OMI-retrieved NO<sub>2</sub> columns between year 2010 and later years (i.e., 2011, 2012, 2013 and 2014) in Marcellus Shale (Data in 2010 as a baseline).

## Marcellus Shale Gas Play, All Wells, 2005-2014



Source: post carbon institute  
<http://www.postcarbon.org/>

# Results



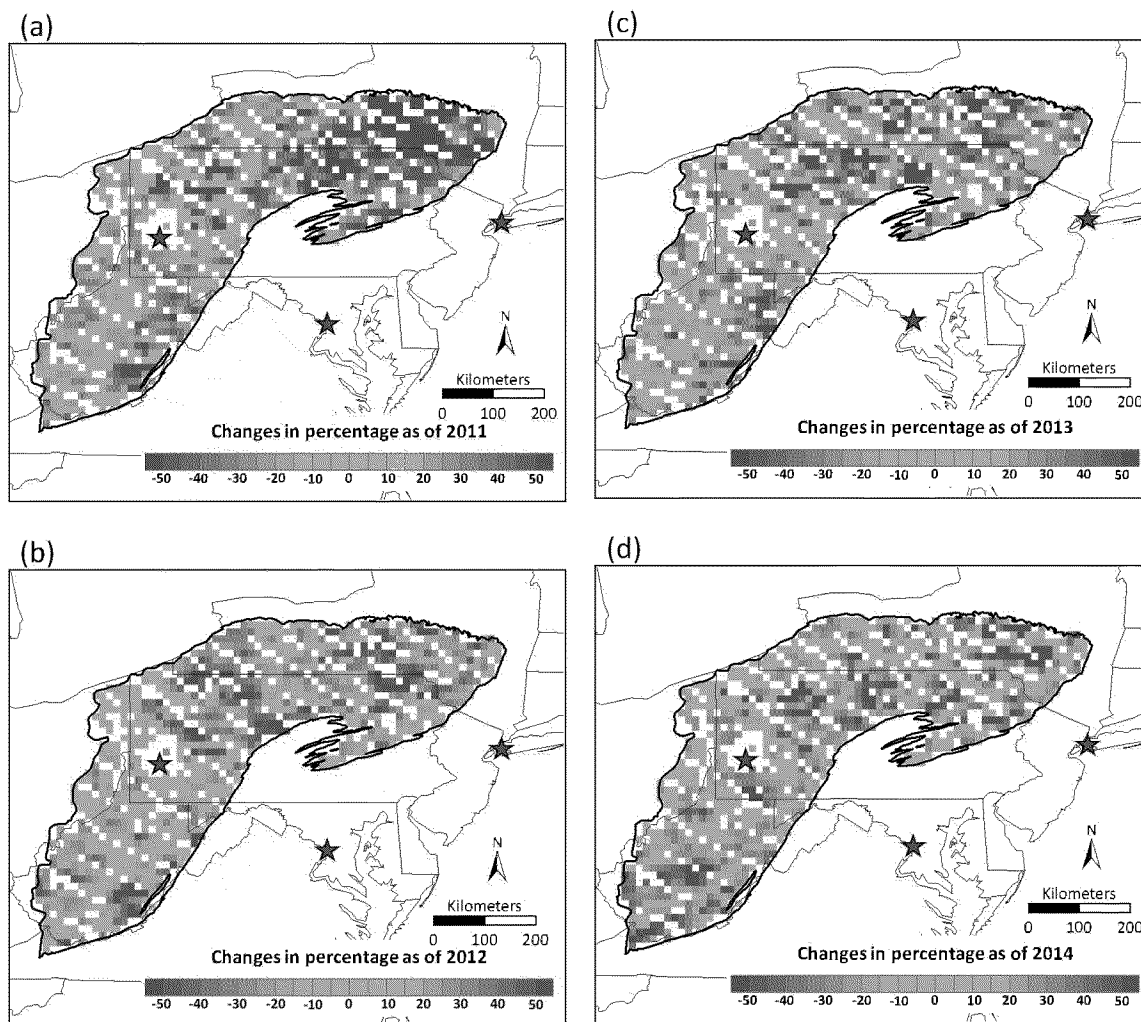
$$\Delta E = \frac{E_i - E_{2010}}{E_{2010}}$$

$i$  (year) =  
2011, 2012, 2013 and 2014

White areas present  
high populated areas

**Figure 8.** Changes in percentage for summertime average NO<sub>x</sub> emissions between year 2010 and later years (i.e., 2011, 2012, 2013 and 2014) in Barnett, Eagle Ford and Haynesville Shale (Data in 2010 as a baseline).

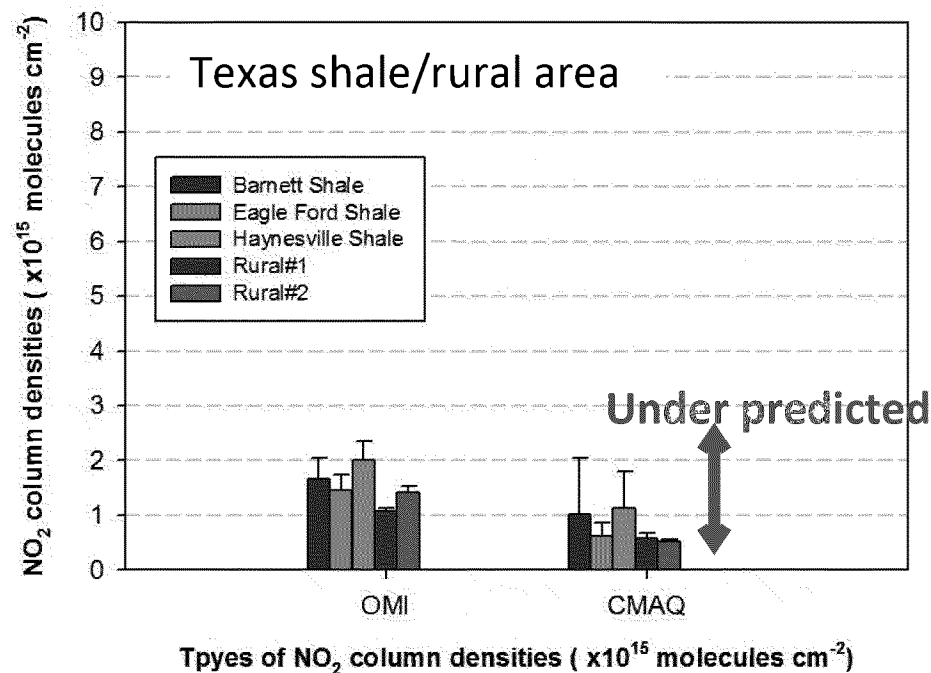
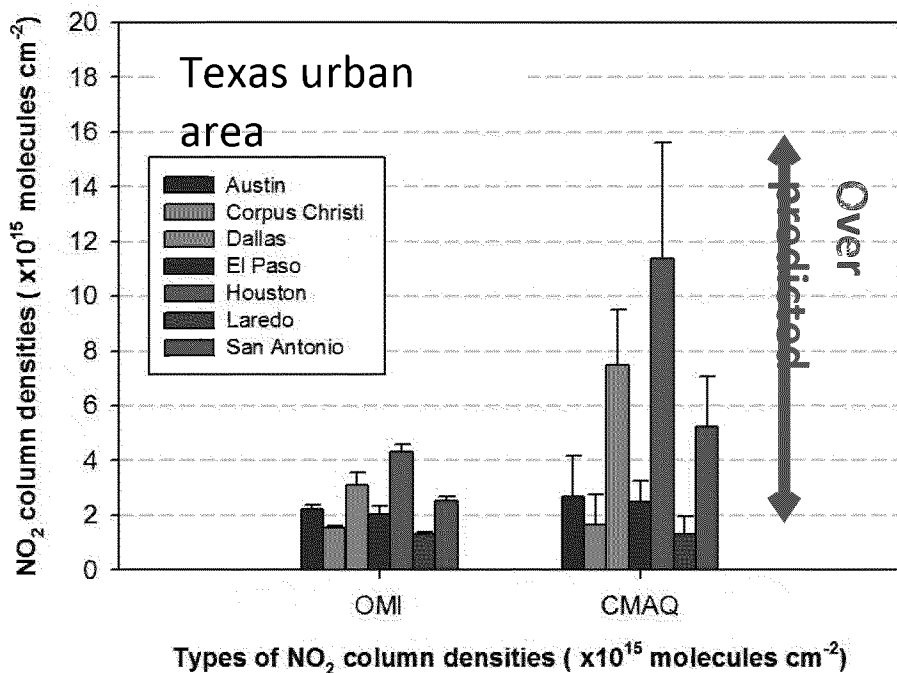
# Results



White areas present  
high populated areas

**Figure 9.** Changes in percentage for summertime average  $\text{NO}_x$  emissions between year 2010 and later years (i.e., 2011, 2012, 2013 and 2014) in Marcellus Shale (Data in 2010 as a baseline).

# Results



**Figure 10.** NO<sub>2</sub> column densities in 2010 from OMI and CMAQ model for Texas urban and shale/rural areas.

# Conclusions

- The correlation between AQS NO<sub>2</sub> concentrations and OMI-retrieved NO<sub>2</sub> columns in Texas and Pennsylvania is close to linear.
- There is a significant linear correlation between CMAQ modeled surface NO<sub>2</sub> concentrations and NO<sub>x</sub> emissions for each shale areas. The range of R square values is from 0.595 to 0.809.
- Increase in Texas OMI-retrieved NO<sub>2</sub> columns is observed in three shale areas from 2011 to 2013 as compare to 2010, except 2014.
- In the Marcellus Shale, increased OMI-retrieved NO<sub>2</sub> columns are concentrated on well locations.
- Estimate of NO<sub>x</sub> emissions is corresponding to changes in OMI-retrieved NO<sub>2</sub> columns.
- Over predicted and under predicted modeled NO<sub>2</sub> column densities from CMAQ model can be found in urban and rural/shale area.

# References

1. U.S. EIA 2015a Annual Energy Outlook 2015 (Washington, DC: U.S. Department of Energy).
2. O'Sullivan F and Paltsev S 2012 Shale gas production: potential versus actual greenhouse gas emissions *Environ. Res. Lett.* **7** 044030.
3. Alamo Area Council of Governments 2014 Oil and Gas Emission Inventory, Eagle Ford Shale (San Antonio, TX: Texas Commission on Environmental Quality)
4. Litovitz A, Curtright A, Abramzon S, Burger N and Samaras C 2013 Estimation of regional air-quality damages from Marcellus Shale natural gas extraction in Pennsylvania *Environ. Res. Lett.* **8** 014017.
5. Roy A A, Adams P J and Robinson A L 2014 Air pollutant emissions from the development, production, and processing of Marcellus Shale natural gas *J. Air Waste Manage. Assoc.* **64** 19-37.

# Thank you!!

## Questions??

Andy Chang PhD Candidate  
Texas A&M University-Kingsville  
Department of Environmental Engineering  
[cyandychang@gmail.com](mailto:cyandychang@gmail.com)



To: 'airstar0077@gmail.com'[airstar0077@gmail.com];  
 'amanda.l.davis@tn.gov'[amanda.l.davis@tn.gov]; 'ASadar@achd.net'[ASadar@achd.net];  
 'avickers@marama.org'[avickers@marama.org]; Beeler, Cindy[Beeler.Cindy@epa.gov];  
 'brett.davis@wyo.gov'[brett.davis@wyo.gov]; 'brian.bohlmann@wyo.gov'[brian.bohlmann@wyo.gov];  
 'buzz.asselmeier@illinois.gov'[buzz.asselmeier@illinois.gov];  
 'Byeong.Kim@dnr.state.ga.us'[Byeong.Kim@dnr.state.ga.us]; Schroeder,  
 Carrie[carrie.schroeder@deq.ok.gov]; Garbe, William (Cooper)[Cooper.Garbe@deq.ok.gov]; Cozzie,  
 David[Cozzie.David@epa.gov]; 'curtis.taipale@state.co.us'[curtis.taipale@state.co.us];  
 'cwoods@csg.org'[cwoods@csg.org]; 'dale.wells@state.co.us'[dale.wells@state.co.us];  
 'DALEBOUTR@michigan.gov'[DALEBOUTR@michigan.gov];  
 'darla.potter@wyo.gov'[darla.potter@wyo.gov]; Dewees, Jason[Dewees.Jason@epa.gov];  
 djohnson@westar.org[djohnson@westar.org]; 'ektrythall@nd.gov'[ektrythall@nd.gov];  
 'Erica.Fetty@epa.state.oh.us'[Erica.Fetty@epa.state.oh.us]; 'fcook@blm.gov'[fcook@blm.gov];  
 'gabrielle.petron@noaa.gov'[gabrielle.petron@noaa.gov];  
 'gary.reinbold@deq.idaho.gov'[gary.reinbold@deq.idaho.gov]; Glover, Ed[Glover.Ed@epa.gov];  
 'greg.lauderdale@tceq.texas.gov'[greg.lauderdale@tceq.texas.gov];  
 'heather.sands@ncdenr.gov'[heather.sands@ncdenr.gov];  
 'Holly.Ferguson@tceq.texas.gov'[Holly.Ferguson@tceq.texas.gov]; Hosford,  
 Chip[hosford.chip@epa.gov]; Houyoux, Marc[Houyoux.Marc@epa.gov];  
 'janssen@ladco.org'[janssen@ladco.org]; 'Jim.Price@tceq.texas.gov'[Jim.Price@tceq.texas.gov];  
 'JMCDILL@marama.org'[JMCDILL@marama.org]; Kalfas, Joshua L.[Joshua.Kalfas@deq.ok.gov];  
 'jsemerad@nd.gov'[jsemerad@nd.gov]; Kaleri, Cynthia[kaleri.cynthia@epa.gov];  
 'Kathy.Pendleton@tceq.texas.gov'[Kathy.Pendleton@tceq.texas.gov]; 'kgee@pa.gov'[kgee@pa.gov];  
 Koerber, Mike[Koerber.Mike@epa.gov]; 'LDeahl@kdheks.gov'[LDeahl@kdheks.gov];  
 'lisa.ehrhart@deq.virginia.gov'[lisa.ehrhart@deq.virginia.gov]; Lundelius,  
 Diana[Lundelius.Diana@epa.gov]; Macpherson, Alex[Macpherson.Alex@epa.gov];  
 mark.jones@state.nm.us[mark.jones@state.nm.us];  
 'Mark.McMillan@dphe.state.co.us'[Mark.McMillan@dphe.state.co.us]; Mason,  
 Rich[Mason.Rich@epa.gov]; 'masond1@michigan.gov'[masond1@michigan.gov]; McKittrick,  
 Alexis[McKittrick.Alexis@epa.gov];  
 michael.abraczinskas@ncdenr.gov[michael.abraczinskas@ncdenr.gov];  
 'Michael.Ege@tceq.texas.gov'[Michael.Ege@tceq.texas.gov];  
 'michael.trahiotis@ct.gov'[michael.trahiotis@ct.gov]; 'mike.pring@erg.com'[mike.pring@erg.com];  
 'mike.schneider@state.nm.us'[mike.schneider@state.nm.us]; Moore, Bruce[Moore.Bruce@epa.gov];  
 'muhl@blm.gov'[muhl@blm.gov]; Nam, Ed[nam.ed@epa.gov];  
 'Nicholle.Worland@dep.state.nj.us'[Nicholle.Worland@dep.state.nj.us];  
 'oppapage@gw.dec.state.ny.us'[oppapage@gw.dec.state.ny.us]; Page, Steve[Page.Steve@epa.gov];  
 'patricia\_f\_brewer@nps.gov'[patricia\_f\_brewer@nps.gov];  
 'pbarickman@utah.gov'[pbarickman@utah.gov];  
 'Rachel.Melton@tceq.texas.gov'[Rachel.Melton@tceq.texas.gov];  
 'Ray.Papalski@dep.state.nj.us'[Ray.Papalski@dep.state.nj.us];  
 'Regi.Oommen@erg.com'[Regi.Oommen@erg.com]; Riddick, Lee[Riddick.Lee@epa.gov];  
 'Robert.J.Betterton@wv.gov'[Robert.J.Betterton@wv.gov]; 'rsmartin@nd.gov'[rsmartin@nd.gov];  
 'sbogart@pa.gov'[sbogart@pa.gov]; Schell, Bob[Schell.Bob@epa.gov]; Shores,  
 Richard[Shores.Richard@epa.gov]; Snyder, Jennifer[Snyder.Jennifer@epa.gov];  
 sushma.masemore@ncdenr.gov[sushma.masemore@ncdenr.gov];  
 'szelinka@arb.ca.gov'[szelinka@arb.ca.gov]; 'tcfoster@deq.virginia.gov'[tcfoster@deq.virginia.gov]; Terry,  
 Sara[Terry.Sara@epa.gov]; Thoma, Eben[Thoma.Eben@epa.gov];  
 'tmoore@westar.org'[tmoore@westar.org]; 'tnguyen@arb.ca.gov'[tnguyen@arb.ca.gov]; Richardson,  
 Thomas M.[Tom.Richardson@deq.ok.gov]; 'tom.velalis@epa.state.oh.us'[tom.velalis@epa.state.oh.us];  
 Tonnesen, Gail[Tonnesen.Gail@epa.gov]; Theresa Pella[tpella@censara.org]; Tsirigotis,  
 Peter[Tsirigotis.Peter@epa.gov]; 'tune@adeq.state.ar.us'[tune@adeq.state.ar.us];  
 'twallace@mde.state.md.us'[twallace@mde.state.md.us]; Waltzer, Suzanne[Waltzer.Suzanne@epa.gov];  
 Wayland, Richard[Wayland.Richard@epa.gov]; Weitz, Melissa[Weitz.Melissa@epa.gov];  
 'wilbanmc@dhc.sc.gov'[wilbanmc@dhc.sc.gov]; Witosky, Matthew[Witosky.Matthew@epa.gov];  
 Wortman, Eric[Wortman.Eric@epa.gov]; 'woswald@utah.gov'[woswald@utah.gov]; Young,

Carl[young.carl@epa.gov]; Fry, Jessica[fry.jessica@epa.gov]; Smith, James-D[Smith.James-D@epa.gov]; Wong, Richard[Wong.Richard@epa.gov]; Stackhouse, Debbie[Stackhouse.Debbie@epa.gov]; 'tammy.manning@ncdenr.gov'[tammy.manning@ncdenr.gov]; 'james.r.smith@tn.gov'[james.r.smith@tn.gov]; 'paige.sprague@tceq.texas.gov'[paige.sprague@tceq.texas.gov]; 'sblakely@adem.state.al.us'[sblakely@adem.state.al.us]; 'Milford, Jana (milford@colorado.edu)'[milford@colorado.edu]; 'Shannon Leigh Capps (shannon.capps@colorado.edu)'[shannon.capps@colorado.edu]; Baker, Kirk[Baker.Kirk@epa.gov]; Kleman, Cecelia M.[Cecelia.Kleman@deq.ok.gov]; 'Matt.A.Kemper@wv.gov'[Matt.A.Kemper@wv.gov]; 'Andrew.bollman@ncdenr.gov'[Andrew.bollman@ncdenr.gov]; cindy.heil@alaska.gov[cindy.heil@alaska.gov]; Dresser, Chris[Dresser.Chris@epa.gov]; 'svance@utah.gov'[svance@utah.gov]; Ross, Lindsay A.[Lindsay.Ross@deq.ok.gov]; Chris.Laley@deq.ok.gov[Chris.Laley@deq.ok.gov]; 'Ames,Rodger (Rodger.Ames@ColoState.EDU)'[Rodger.Ames@ColoState.EDU]; 'abrimmer@raqc.org'[abrimmer@raqc.org]; 'gmortensen@utah.gov'[gmortensen@utah.gov]; 'alexis.zubrow@dot.gov'[alexis.zubrow@dot.gov]; 'daniel.bon@state.co.us'[daniel.bon@state.co.us]; 'zgraves@kdheks.gov'[zgraves@kdheks.gov]; 'Anthony.Marchese@colostate.edu'[Anthony.Marchese@colostate.edu]; Hanson, Andrew[Hanson.Andrew@epa.gov]; Gamas, Julia[Gamas.Julia@epa.gov]; 'cmeister@blm.gov'[cmeister@blm.gov]; 'ctuers@blm.gov'[ctuers@blm.gov]; Schwartz, Colin[Schwartz.Colin@epa.gov]; 'Gerry.Baker@iogcc.state.ok.us'[Gerry.Baker@iogcc.state.ok.us]; 'CarolBooth@iogcc.state.ok.us'[CarolBooth@iogcc.state.ok.us]; 'john.clark2@alaska.gov'[john.clark2@alaska.gov]; Mark.Gibbs\_deq.ok.gov[Mark.Gibbs@deq.ok.gov]  
**From:** Gibbs, Mark  
**Sent:** Wed 1/20/2016 4:57:07 PM  
**Subject:** National Oil & Gas Emissions Committee - Subpart W Implementation Webinar & Action Items from last week's call

Hi Everybody:

Sorry for the short notice – here's the details on the webinar later today covering the new requirements for Subpart W for 2016:

**GHGRP Subpart W - New Requirements for Reporting Year 2016.** Wednesday January 20, 2:00-3:00pm EST.

EPA will provide an overview of the new Subpart W (Petroleum and Natural Gas Systems) requirements for reporting year 2016, including the new Onshore Petroleum and Natural Gas Gathering and Boosting and Onshore Natural Gas Transmission Pipelines segments and the inclusion of well identification numbers and oil wells with hydraulic fracturing in the existing Onshore Petroleum and Natural Gas Production segment.

Registration link: <https://attendee.gotowebinar.com/register/3905542639520836865>

Here are the Action Items from our meeting last week:

**S/LT/T's:**

- Review latest activity and emissions for your area
- Do changes between 2011 and 2014 and incorporation of Subpart W data make sense?
- Especially review VOC's from the important SCC 2310021010
- Submit area O&G emissions to the EIS by Friday, February 19<sup>th</sup> or else notify Jennifer Snyder ASAP if you need extra time

**Jennifer Snyder:**

- Will look into plans for supplementing emissions for pollutants not reported by states

**Mark Gibbs**

- Will follow up with industry on their review of the tool and incorporation of Subpart W data

**ERG**

- How significant are the emissions that have been transferred from condensate to oil tanks because of the change in the gas/oil ration?
- Should flashing losses be grouped with standing/breathing/working losses?

**Melissa Weitz**

- Will send out emails to the committee about updates to the National GHG Inventory, will do presentation to the committee when the production sector memo is done

**Future Issue:**

- Reviewing O&G SCC's for completeness and comprehensiveness

As always, let me know if you have any questions, comments or suggestions for future meetings.

Mark

Mark Gibbs

Emission Inventory Manager

Oklahoma DEQ

(405) 702-4179

**To:** Beeler, Cindy[Beeler.Cindy@epa.gov]; Mark.Gibbs\_deq.ok.gov[Mark.Gibbs@deq.ok.gov]; Snyder, Jennifer[Snyder.Jennifer@epa.gov]; tmoore@westar.org[tmoore@westar.org]; Theresa Pella[tpella@censara.org]  
**Cc:** Sheri Buttarazzi[sbuttarazzi@marama.org]; MARAMA Training[training@marama.org]; sbogart@pa.gov[sbogart@pa.gov]  
**From:** Julie McDill  
**Sent:** Tue 2/2/2016 2:53:27 PM  
**Subject:** You are invited to attend a MARAMA Training Webinar - Oil and Gas Storage Vessels - Thursday March 3 from 1:30-3:00 Eastern

Hello Agency Oil and Gas Staff,

This email is to announce a MARAMA webinar training event on Thursday March 3 from 1:30 – 3:00 PM Eastern concerning Emissions from Storage Vessels at Onshore Oil and Natural Gas Production Facilities. This webinar is based on the recently published USEPA Compliance Alert which was issued as a result of EPA and state investigations which identified Clean Air Act compliance concerns regarding significant emissions from storage tanks at onshore oil and natural gas production facilities. EPA and state inspectors have observed emissions from oil & condensate storage tank pressure relief devices (PRDs), such as closed thief hatches and pressure relief valves. Inadequately designed, sized, operated, and/or maintained vapor control systems may not effectively capture and control emissions. A liquid dump event from a pressurized separator into an atmospheric storage tank can overwhelm an inadequately designed or sized vapor control system and create back pressure that causes emissions to escape from PRDs.

The Alert discusses engineering and maintenance practices causing the compliance concerns and potential emissions-reducing solutions. To download the Alert that the webinar will expand on here is the link:

<http://www2.epa.gov/sites/production/files/2015-09/documents/oilgascompliancealert.pdf>

Cindy Beeler, of USEPA region 8 will be our presenter. She has worked in the Oil & Gas industry since 1982. She worked in the project management services division in Exxon for 15 years to engineer, procure and construct mostly upstream oil & gas projects, onshore and offshore, and both domestic U.S. and overseas. Her work there involved cost and schedule estimating, project tracking & forecasting and contract administration.

After obtaining a Masters of Science in Environmental Engineering, she began work at the U.S. Environmental Protection Agency enforcing the Clean Air Act primarily in the upstream oil & gas sector in EPA Region 8 (Colorado, Wyoming, Montana, Utah, North Dakota, South Dakota).

Instead of estimating and tracking costs, she accounted for emission reductions and gas conserved through their settlements. She led a national O&G Air Technical Workgroup and represented Region 8 on several national workgroups, such as Greenhouse Gas Reporting Program Subpart W and the New Source Performance Standards (NSPS) Subpart OOOO. She has been certified to use the FLIR thermal infrared (IR) camera and has used it extensively at oil & gas facilities.

To register for the webinar follow this link:

Registration URL: <https://attendee.gotowebinar.com/register/8371500486339365634>

Any government agency staff can attend this webinar, so feel free to forward this email with the link to your colleagues.

After registration, the webinar system will send reminders 1 day and 1 hour before the webinar containing your link to join the session. If you have not joined a MARAMA webinar in the past, I urge you to sign in 15 minutes early at 1:15 PM. We will be there to help resolve any technical issues that might arise.

Questions? Please email or call Sherri Buttarazzi of MARAMA ([sbuttarazzi@marama.org](mailto:sbuttarazzi@marama.org) 443-901-1882)

**To:** matt.harrison@aecom.com[matt.harrison@aecom.com]  
**From:** Cozzie, David  
**Sent:** Thur 7/2/2015 12:52:37 PM  
**Subject:** Power Point from AWMA  
Cozzie AWMA Final.pdf

Matt,

Attached is copy of my presentation on EPA's Oil and Gas Activities that you requested.

David Cozzie

Group Leader, Fuels and Incineration Group

919-541-5356

# Update on EPA Oil and Gas Activities



# Overview

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## Background

### Upcoming regulatory actions:

- New Source Performance Standards

- Control Technique Guidelines

- Source Determination

- Tribal NSR

## Voluntary Efforts

## Emissions inventories and reporting

# Background

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In January, EPA announced a series of steps it plans to take to address methane and smog-forming VOC emissions from the oil and gas industry

The goal is to ensure continued, safe and responsible growth in U.S. oil and natural gas production

Our plans to address methane are part of the overall White House Methane Strategy

The strategy consists of both regulatory and voluntary approaches

# New Source Performance Standards (NSPS)

---

Upcoming proposal will build on our 2012 NSPS for the oil and gas industry to reduce methane emissions and to achieve additional reductions in VOCs

Proposed rule will include cost-effective, commonsense requirements for new and modified oil and gas sources that are significant emitters of methane and VOCs.

Focuses on the sources covered in the five White Papers issued in 2014 for peer review and public comment

- Compressors

- Emissions from completions and ongoing production of hydraulically fractured oil wells

- Leaks

- Liquids unloading

- Pneumatic devices

Proposal this summer and a final rule in spring 2016

# Engaging Small Businesses

---

As part of the NSPS development we have been involved in a Small Business Advocacy Review (SBAR) process working with the Small Business Administration and the Office of Management and Budget.

The Regulatory Flexibility/Small Business Regulatory Enforcement Fairness acts require us to convene an SBAR panel for this rule to hear from small operators to help us understand their unique challenges and concerns.

We believe this is important to do.

The SBAR process should be completed later this summer.

# Control Technique Guidelines (CTGs)

---

CTGs provide states guidelines for requiring reasonably available control technology (RACT) to achieve VOC reductions from existing sources in ozone nonattainment areas that are classified as Moderate and above, and statewide in states in the Ozone Transport Region

Once a final CTG is issued, affected states will need to update their State Implementation Plans showing how they will reduce VOC emissions from sources covered by the CTG

Although not required, states can require RACT (and implement the CTGs) in *attainment areas* in their states, if they choose to do so

Plan to issue the draft CTGs for public review and comment at the same time we issue a proposed NSPS

# Voluntary Efforts

---

EPA plans to expand the successful Natural Gas STAR Program by launching a new partnership in collaboration with key stakeholders by the end of this year

Under the new partnership, EPA plans to enter into voluntary agreements with individual companies that achieve the following:

- Encourage innovation and ambitious commitments with flexible achievement mechanisms

- Provide accountability and transparency for reduction commitments, and

- Track progress toward specific methane emission reduction activities

EPA is working with the departments of Energy and Transportation and with oil and gas companies, individually or through industry associations and broader initiatives such as the Downstream Initiative or the One Future Initiative, to develop a program based on robust commitments to reduce methane emissions

EPA will release a program proposal soon, and then collect and synthesize feedback in order to launch the new program with founding partners by the end of 2015

# Source Determination Rule

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EPA is developing a proposed rulemaking to clarify the definition of “adjacent” as it is used to determine the source to be permitted under new source review requirements for the oil and gas extraction industry.

The timing of this rule will coincide with the oil and gas NSPS proposal, planned for summer 2015.

# Tribal New Source Review

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In May 2014, EPA issued an Advance Notice of Proposed Rulemaking (ANPR) seeking broad feedback on implementing New Source Review permitting requirements for true minor sources in the oil and natural gas source category in Indian country. (ANPR published in June 2014.)

Sought feedback on three approaches for implementing requirements: federal implementation plan; general permit or permit by rule.

Considering feedback on the ANPR; anticipate issuing a proposal at the same time as the proposed NSPS and draft CTGs.



# Emissions Inventories and Reporting

# U.S. Greenhouse Gas Emissions Inventory

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Official U.S. estimate of greenhouse gas emissions for reporting to United Nations Framework Convention on Climate Change (UNFCCC)

Annual national-level inventory submissions to the UNFCCC since 1994

EPA leads Inventory development, working with several agencies  
e.g. input data on forestry from USFS, data on energy from EIA

## Sectors Covered

Energy, Industrial Processes, Agriculture, Land-Use Change and Forestry, and Waste

## Gases Covered

CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>

Record of emissions trends over time

Each year, Inventory undergoes expert review, public review, and UNFCCC review

# Oil and Gas Emission Estimates in the US GHG Inventory

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Oil and gas methane emissions account for 3% of total U.S. GHG emissions, and 29% of U.S. CH<sub>4</sub> emissions  
In 2013 (most recent data year) 183 MMT CO<sub>2</sub>e total CH<sub>4</sub> emissions from oil and gas systems

- 71 MMT CO<sub>2</sub>e from oil and gas production segments

- 23 MMT CO<sub>2</sub>e from processing segment

- 55 MMT CO<sub>2</sub>e from transmission and storage segment

- 33 MMT CO<sub>2</sub>e from distribution segment

EPA continues to update GHG Inventory estimates to reflect best available information

- Annual updates to GHG Inventory estimates

- Annual expert and public review process

- Use of GHGRP upcoming input data

- Review of new studies for updates

# GHG Reporting Program (GHGRP)

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Launched in response to FY 2008 Consolidated Appropriations Act

Annual reporting of GHGs by 41 source categories

- 33 types of direct emitters

- 6 types of suppliers of fuel and industrial GHGs

- Facilities that inject CO<sub>2</sub> underground for geologic sequestration, enhanced oil recovery, or any other purpose

Most source categories began collecting data in 2010, with first annual reports submitted to EPA in September 2011

- We now have 5 years of data for 29 source categories and 4 years of data for 12 source categories

Facilities use uniform methods prescribed by the EPA to calculate GHG emissions, such as direct measurement, engineering calculations, or emission factors derived from direct measurement

- In some cases, facilities have a choice of calculation methods for an emission source

# Oil and Gas Emissions in GHGRP

---

Reporting covers production, processing, transmission and storage, and distribution

EPA received annual reports from over 2,000 facilities

Reported emissions totaled 224 Million Metric Tons (MMT) CO<sub>2</sub>e, with 74 MMT CO<sub>2</sub>e emissions of methane

Largest segments in terms of reported GHG emissions were onshore production, natural gas processing, and natural gas transmission

# Evaluating External Studies

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Representativeness (national, regional, production-level, emissions-level)

Data on controls, practices, and other relevant information

Availability of relevant activity data

Ability to develop emission factors and activity data for the time series

Robust and transparent sampling approach, measurement method, and key background data

# Role of Measurement Studies in Improving Inventories

Type of Study	Possible Feedback to Inventories	Key Considerations
Measurement of specific activities, processes and equipment to develop improved emission factors (e.g. UT Austin studies)	<ul style="list-style-type: none"> <li>- Direct improvements</li> <li>- Verification/QA of EPA measurements</li> </ul>	<ul style="list-style-type: none"> <li>- Providing information on activities taking place at the time of measurement and representativeness at national / regional levels</li> <li>- General operating conditions</li> <li>- High-emission venting events</li> <li>- Controlled versus uncontrolled</li> </ul>
Independent verification of inventory estimates through inverse modeling (e.g. NOAA verification studies)	<ul style="list-style-type: none"> <li>- Provides general conclusions about potential over- and under-estimates</li> </ul>	<ul style="list-style-type: none"> <li>- Using the appropriate Inventory comparison Seasonal/regional variations</li> <li>- Documentation of assumptions and uncertainties</li> <li>- Attribution is a challenge</li> <li>- Limited ability to pinpoint which data inputs need to be improved</li> </ul>

# Estimating Criteria and HAP Emissions

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Working with states to improve emissions inventories

National Oil and Gas Workgroup

National Emissions Inventory

States provide emissions and/or inputs to emissions tool

2014 NEI emissions cycle ongoing now

See <http://www.epa.gov/ttn/chief/net/2014inventory.html>



# Oil and Gas Emissions Tool

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Available to state and local agencies to develop emission inventories

- Based on user-supplied activity and emissions inputs

- Access-based

States can provide many inputs on oil and gas practices in their state

Can use the tool to compute emissions and submit to NEI

Regional groups (e.g., WRAP, CENSARA) provide inputs

Also coordinate with GHG inventory program

See also <http://1.usa.gov/1Gxg2mM>

# Contact Information

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David Cozzie

Fuels and Incineration Group

Office of Air Quality Planning and Standards

919-541-5356

[cozzie.david@epa.gov](mailto:cozzie.david@epa.gov)

**To:** Clint Woods[cwoods@csg.org]  
**Cc:** Cozzie, David[Cozzie.David@epa.gov]; Davis, Alison[Davis.Alison@epa.gov]  
**From:** Moore, Bruce  
**Sent:** Tue 9/15/2015 2:29:19 PM  
**Subject:** RE: AAPCA Annual Meeting - Speaker and Materials  
[2012-2015 NSPS Table 9-9.pdf](#)  
[EPA OG Presentation final 9 9.pptx](#)

Clint,

My apologies for just getting back to you. We've confirmed that the speaker for 9:00 – 9:40 AM on September 18 on the topic of "Oil & Gas Regulatory Updates" will be my boss, David Cozzie, who is the Group Leader for the Fuels and Incineration Group within the Sector Policies and Programs Division of OAQPS.

I've attached the presentation that gives an overview of the 4 EPA proposed actions that were signed on August 18 and which should publish in the next few days. David is out through today but will return on Wednesday morning. I believe is without email capability until he returns, so he asked me to let you know he'll send a bio to you on Wednesday.

Thanks again for the invitation -- I hate to miss it myself (I'll be out of town).

Bruce

**Bruce Moore**

***Senior Technical Advisor - Oil & Natural Gas Sector***

Office of Air Quality Planning and Standards

U.S. Environmental Protection Agency

Research Triangle Park, NC 27711

(919) 541-5460

moore.bruce@epa.gov

**For information, visit:** [www.epa.gov/airquality/oilandgas](http://www.epa.gov/airquality/oilandgas)

**From:** Clint Woods [mailto:cwoods@csg.org]  
**Sent:** Tuesday, September 15, 2015 9:25 AM  
**To:** Moore, Bruce  
**Subject:** RE: AAPCA Annual Meeting - Details for Presenters

Bruce,

Just wanted to check in with you regarding the presentation Thursday – Any chance you have it narrowed down? Thanks!

Clint

**From:** Moore, Bruce [mailto:Moore.Bruce@epa.gov]  
**Sent:** Friday, September 11, 2015 5:02 PM  
**To:** Clint Woods  
**Subject:** RE: AAPCA Annual Meeting - Details for Presenters

Clint,

As it turns out, my schedule changed and I will be out of the office and unavailable to participate. I am lining up a management level person to give the presentation instead, but I will not be able to confirm that until Monday. We will for sure have the presentation to you on Monday as well.

Sorry for the inconvenience,

Bruce

**Bruce Moore**

***Senior Technical Advisor - Oil & Natural Gas Sector***

Office of Air Quality Planning and Standards

U.S. Environmental Protection Agency

Research Triangle Park, NC 27711

(919) 541-5460

[moore.bruce@epa.gov](mailto:moore.bruce@epa.gov)

***For information, visit:*** [www.epa.gov/airquality/oilandgas](http://www.epa.gov/airquality/oilandgas)

**From:** Clint Woods [<mailto:cwoods@csg.org>]

**Sent:** Friday, September 11, 2015 4:19 PM

**To:** Moore, Bruce

**Subject:** RE: AAPCA Annual Meeting - Details for Presenters

Bruce,

I hope all is well – Looking forward to seeing you next week in Raleigh. I just wanted to check in to see if you might be able to send over a short bio for the participant packet before Noon on Monday? Thanks so much!

Clint

AAPCA

**From:** Clint Woods  
**Sent:** Tuesday, September 08, 2015 4:36 PM  
**To:** 'Moore, Bruce'  
**Subject:** AAPCA Annual Meeting - Details for Presenters

Bruce,

Thanks so much for your willingness to participate at the Association of Air Pollution Control Agencies' 2015 Annual Meeting next week. Below are a handful of logistical items and details for the meeting:

- Location. AAPCA's Annual Meeting will be held at the DoubleTree by Hilton Hotel Raleigh - Brownstone – University, located at 1707 Hillsborough Street in Raleigh, North Carolina. The majority of the sessions on September 17 will be held in the Washington/Jefferson Room on the Second Floor of the DoubleTree.
- Agenda. We have you scheduled to present from 9:00 – 9:40 AM on September 18 on the topic of “Oil & Gas Regulatory Updates.” Fred Durham of the West Virginia Department of Environmental Protection will be providing a brief introduction. In addition, attached is the current agenda for the open sessions at the Annual Meeting on September 17. Please let me know as soon as possible if there are any necessary changes to your name, title, or presentation title. We invite you to join us for any portion of these open sessions, including meals. You can also find some suggested off site dining options here. We are expecting approximately 100 attendees for the open sessions on Thursday and roughly 60 state and local agency employees in attendance on Friday morning.
- Biography. We will be distributing copies of all speaker biographies to participants. Please send a 1-2 paragraph version to cwoods@csg.org by 6:00 PM Eastern on Thursday, September 10.
- Presentation Slides. At the meeting, AAPCA will have a computer, screen package, podium, and head table with microphones. Please send a copy of any slides or presentation materials to cwoods@csg.org by 6:00 PM Eastern on Monday, September 14 and we should be able to have an electronic copy available onsite. Please also let

me know if there are any restrictions on placing slides or other presentation on AAPCA's website following the meeting.

-

We look forward to seeing you in Raleigh – Please let me know if you have any questions, concerns, or feedback between now and then. You can reach me anytime via email or on my cell phone at 540.455.5570. Thanks!

Clint Woods

Executive Director

Association of Air Pollution Control Agencies

2760 Research Park Dr.

Lexington, KY 40511

859.244.8040 – office

[cwoods@csg.org](mailto:cwoods@csg.org)

<http://www.cleanairact.org>

**Sources covered by the 2012 NSPS for VOCs and  
the 2015 Proposed NSPS for Methane and VOCs, by site**

Location and Equipment/Process Covered	Required to Reduce Emissions Under EPA Rules	Rules that Apply		
		2012 NSPS for VOCs*	2015 proposed NSPS for methane	2015 proposed NSPS for VOCs
Natural Gas Well Sites				
Completions of hydraulically fractured wells	✓	☉	☉	
Compressors	Not covered			
Equipment leaks	✓		☉	☉
Pneumatic controllers	✓	☉	☉	
Pneumatic pumps	✓		☉	●
Storage tanks	✓	●		
Oil Well Sites				
Completions of hydraulically fractured wells	✓		☉	☉
Compressors	Not covered			
Equipment leaks	✓		☉	☉
Pneumatic controllers	✓	☉	☉	
Pneumatic pumps	✓		☉	☉
Storage tanks	✓	●		
Production Gathering and Boosting Stations				
Compressors	✓	☉	☉	
Equipment leaks	✓		☉	☉
Pneumatic controllers	✓	☉	☉	
Pneumatic pumps	✓		☉	☉
Storage tanks	✓	☉		
Natural Gas Processing Plants				
Compressors	✓	☉	☉	
Equipment leaks	✓	☉	☉	
Pneumatic controllers	✓	☉	☉	
Pneumatic pumps	✓		☉	☉
Storage tanks	✓	●		
Natural Gas Compressor Stations (Transmission & Storage)				
Compressors	✓		☉	☉
Equipment leaks	✓		☉	☉
Pneumatic controllers	✓		☉	☉
Pneumatic pumps	✓		☉	☉
Storage tanks	✓	☉		

\* Note: Sources already subject to the 2012 NSPS requirements for VOC reductions that also would be covered by the proposed 2015 methane requirements would not have to install additional controls, because the controls to reduce VOCs reduce both pollutants





# **Climate, Air Quality and Permitting Proposals For the Oil and Natural Gas Industry**

September 2015

*Deliberative – Do Not Cite or Quote*



# Overview

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- Suite of Commonsense Measures
- At a Glance
- Methane
- Proposed Actions:
  - Updates to the 2012 New Source Performance Standards
  - Draft Control Technique Guidelines
  - Air Permitting Rules
    - Source Determination Rule
    - Federal Implementation Plan for Minor NSR in Indian Country
- Emission Reductions, Benefits and Costs
- Timeline
- Proposed Methane Challenge Program
- Resources



# Suite of Commonsense Measures

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**Will help combat climate change**

**Will reduce GHG emissions, specifically methane**

**Will reduce air pollution that harms public health**

**Will reduce emissions of smog-forming VOCs**

**Will provide certainty for industry and permitting authorities about Clean Air Act permitting requirements**



# Proposed Actions – At a Glance

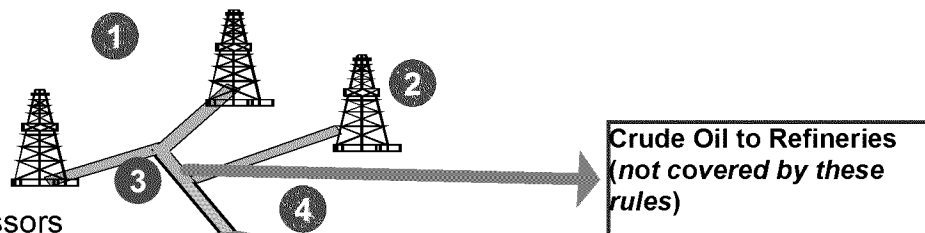
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# The Oil and Natural Gas Industry

Oil and natural gas systems encompass wells, gas gathering and processing facilities, storage, and transmission and distribution pipelines..

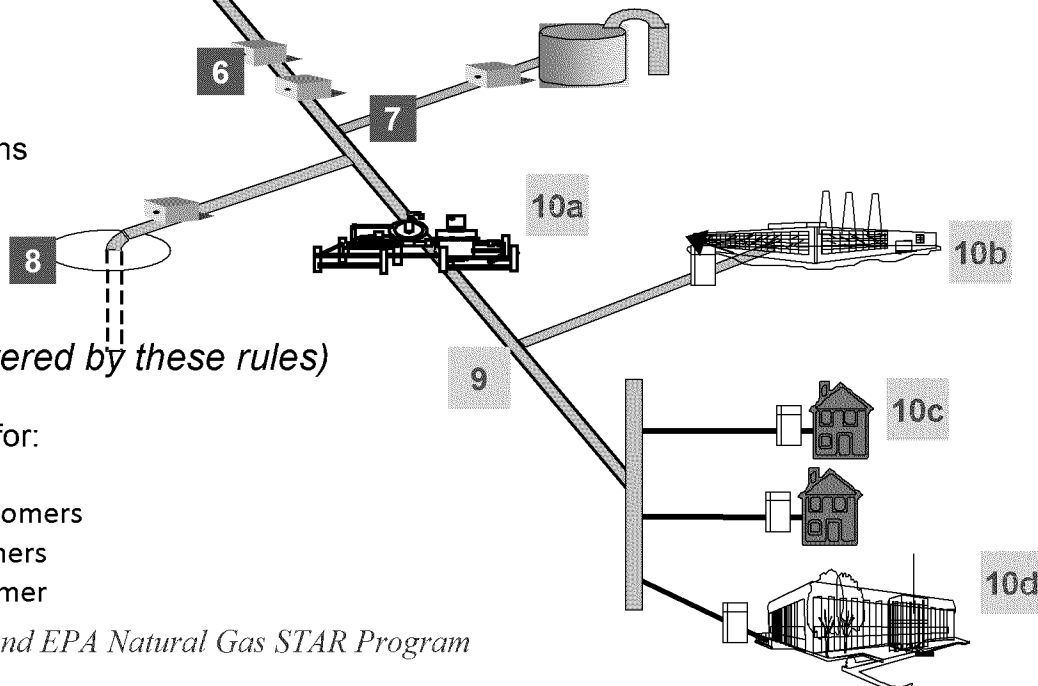
## ● Production & Processing

1. Drilling and Well Completion
2. Producing Wells
3. Gathering Lines
4. Gathering and Boosting Compressors
5. Gas Processing Plant



## ■ Natural Gas Transmission & Storage

6. Transmission Compressor Stations
7. Transmission Pipeline
8. Underground Storage



## ■ Distribution (not covered by these rules)

9. Distribution Mains
10. Regulators and Meters for:
  - a. City Gate
  - b. Large Volume Customers
  - c. Residential Customers
  - d. Commercial Customer

Source: Adapted from American Gas Association and EPA Natural Gas STAR Program



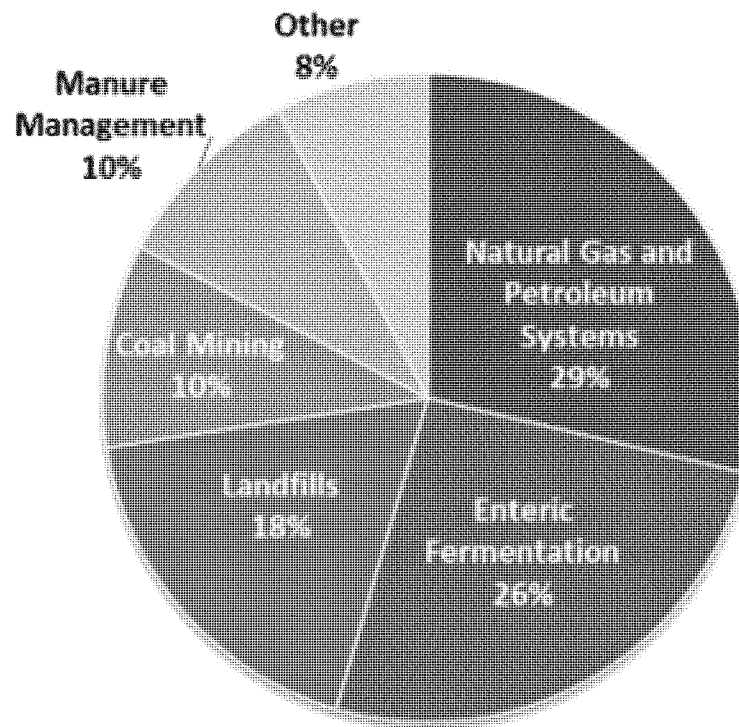
# Methane

Methane is a **potent greenhouse gas** with a global warming potential more than 25 times greater than that of carbon dioxide.

Methane is the **second most prevalent greenhouse gas emitted** in the United States from human activities, and nearly 30 percent of those emissions come from oil production and the production, transmission and distribution of natural gas.

While methane emissions from the oil and gas sector have declined 16 percent since 1990, they are **projected to increase significantly over the next decade** without additional actions to lower them.

U.S. Methane Emissions, By Source



Note: All emission estimates from the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2013*.



# Proposed Actions

Update to the 2012 New Source Performance Standards

Building on the 2012 New Source Performance Standards (NSPS) for VOC emissions for the oil and natural gas industry, EPA's proposed updates would:

- Require that the industry reduce methane
- Add emissions reduction requirements for sources of methane and VOC pollution that were not covered in the 2012 rules. These include requirements that owners/operators:
  - Capture natural gas from the completion of hydraulically fractured wells
    - Natural gas wells were covered in the 2012 rule
    - Green completion/reduced emissions completion required; exemptions for some types of wells (those would have to reduce emissions using combustion)
  - Find and repair leaks (fugitive emissions)
  - Limit emissions from new and modified pneumatic pumps
  - Expand coverage to limit emissions from several types of equipment used at natural gas transmission compressor stations and gas storage facilities
    - Includes compressors and pneumatic controllers that were not covered by the 2012 rule

*Sources already subject to the 2012 NSPS requirements for VOC reductions that also would be covered by the proposed 2015 methane requirements would not have to install additional controls, because the controls to reduce VOCs reduce both pollutants.*

Sources covered by the 2012 NSPS for VOCs and the 2015 Proposed NSPS for Methane and VOCs, by site				
Location and Equipment/Process Covered	Required to Reduce Emissions Under EPA Rules	2012 NSPS for VOCs*	Rules that Apply 2015 proposed NSPS for methane	2015 proposed NSPS for VOCs
<b>Natural Gas Well Sites</b>				
Completions of hydraulically fractured wells	✓	•	•	
Compressors	Not covered			
Equipment leaks	✓		•	•
Pneumatic controllers	✓	•	•	
Pneumatic purges	✓		•	•
Storage tanks	✓	•		
<b>Oil Well Sites</b>				
Completions of hydraulically fractured wells	✓		•	•
Compressors	Not covered			
Equipment leaks	✓		•	•
Pneumatic controllers	✓	•	•	
Pneumatic purges	✓		•	•
Storage tanks	✓	•		
<b>Production Gathering and Processing Stations</b>				
Compressors	✓	•	•	
Equipment leaks	✓		•	•
Pneumatic controllers	✓	•	•	
Pneumatic purges	✓		•	•
Storage tanks	✓	•		
<b>Natural Gas Processing Plants</b>				
Compressors	✓	•	•	
Equipment leaks	✓	•	•	
Pneumatic controllers	✓	•	•	
Pneumatic purges	✓		•	•
Storage tanks	✓	•		
<b>Natural Gas Compressor Stations (Transmission &amp; Storage)</b>				
Compressors	✓		•	•
Equipment leaks	✓		•	•





# Proposed Actions

## Draft Control Techniques Guidelines

**Draft Control Techniques Guidelines (CTG)** would reduce VOC emissions from existing equipment and processes in the oil and natural gas industry.

*	CTG provide recommendations for state/local air agencies to assist them in determining RACT <ul style="list-style-type: none"><li>• Are not regulations and do not impose legal requirements on sources</li><li>• States may use different technology and approaches, subject to EPA approval</li><li>• Other approaches must achieve required pollution reductions</li></ul>
*	Under the Clean Air Act, RACT applies in ozone nonattainment areas classified as "Moderate" and above, and throughout the Ozone Transport Region
*	Draft guidelines include EPA's RACT recommendations for storage tanks, pneumatic controllers, pneumatic pumps, centrifugal and reciprocating compressors, equipment leaks from natural gas processing plants, and fugitive emissions
*	Draft includes detailed information on the cost of available controls to assist states in determining RACT for their sources. Also includes model rule language



# Proposed Actions

## Air Permitting Rules

EPA is issuing two proposals to clarify permitting requirements in the states and in Indian country and make them more efficient.

### **1. Source Determination Rule:**

Seeks broad public feedback on options for determining when multiple pieces of equipment and activities in oil and gas extraction and production must be deemed a single source that is subject to requirements under Clean Air Act air permitting programs.

- Prevention of Significant Deterioration and Nonattainment New Source Review preconstruction permitting programs
  - Title V Operating Permits program.
- Proposal seeks public comment on two options for the definition of the term “adjacent:”
    - Proximity-based – equipment or activities would be considered adjacent if they are located on the same site or are on sites within ¼ mile of each other
    - Proximity or function-based – equipment or activities would be considered adjacent if they are near each other (1/4 mile) or related by function (such as connected by a pipeline)
  - Would apply only to onshore operations; would not apply offshore
  - Proposal only applies to sources engaged in oil and natural gas extraction/production



# Proposed Actions

## Air Permitting Rules

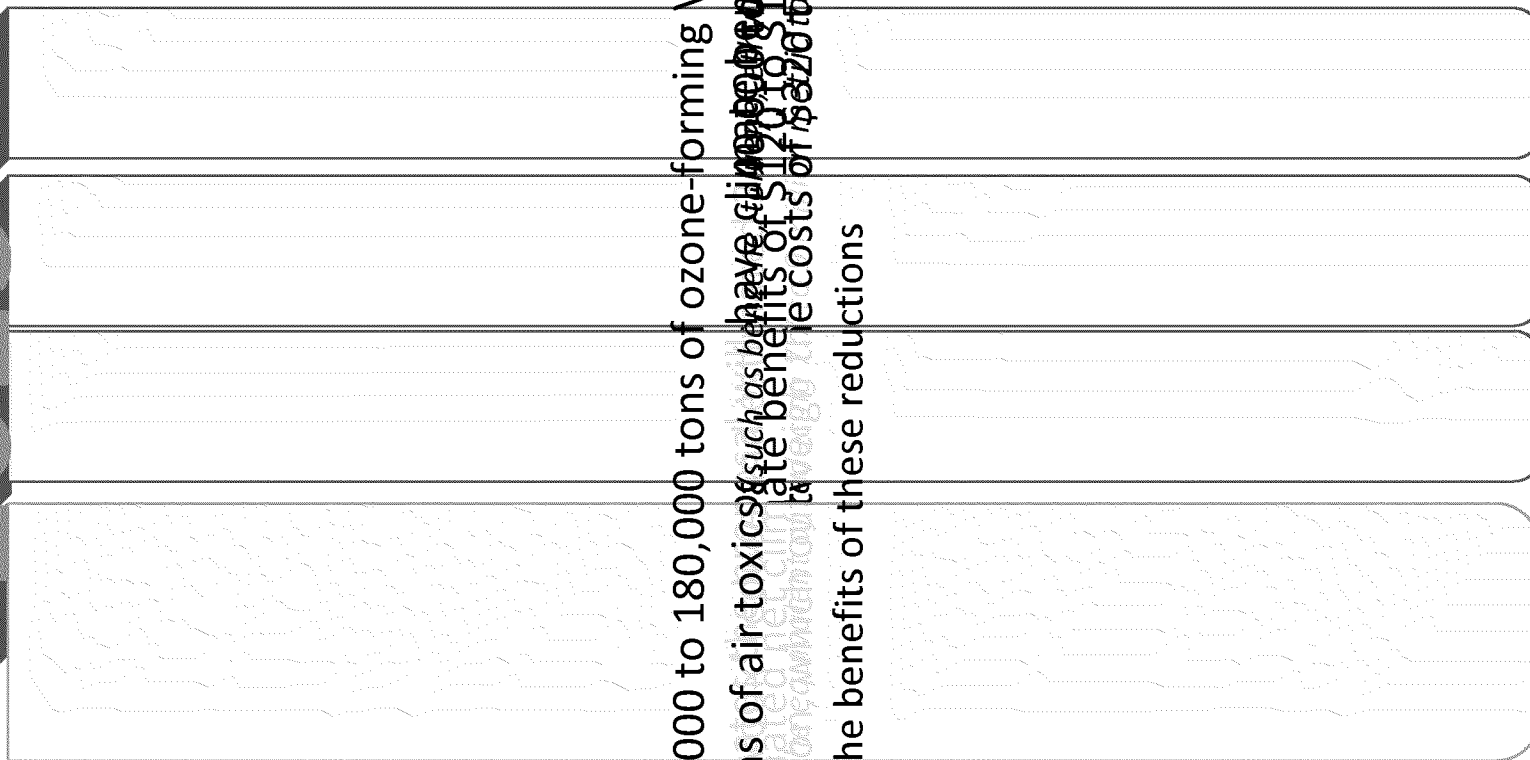
### 2. Proposed federal implementation plan (FIP):

Would implement the Minor New Source Review Program in Indian Country for oil and natural gas production. Would limit emissions of harmful air pollution while making the preconstruction permitting process more efficient for this rapidly growing industry.

- The proposed FIP would be used instead of minor New Source Review (NSR) preconstruction permits in Indian country
- It would incorporate emissions limits and other requirements from six federal air standards to ensure air quality is protected. These include:
  - The 2015 proposed updates to the New Source Performance Standards for the oil and natural gas industry
  - Standards for equipment, including stationary engines, boilers and liquid storage tanks
- The FIP would apply:
  - Throughout reservation areas in Indian country and
  - In any other areas of Indian country for which a tribe or EPA has demonstrated that the tribe has jurisdiction.
- But only in areas designated *attainment*, *attainment/unclassifiable* or *unclassifiable* for a National Ambient Air Quality Standard
- Requirements in the FIP would apply to all new and modified true minor sources in the production segment of the oil and natural gas industry



## 2025



*EPA did not conduct an RIA for the Control Techniques Guidelines, because CTG are not regulations; they are RACT recommendations for states. The agency estimates that the CTG would reduce about 82,000 tons of VOCs a year, if affected states were to implement the recommendations as outlined in the guidelines.*



# Proposed Standards - Timeline

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**March 2014:** The President's Climate Action Plan: Strategy to Reduce Methane Emissions directed EPA to determine how best to pursue methane reductions from the oil and gas sector

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**April 2014:** As part of the Methane Strategy, EPA issued a series of technical white papers, focusing on emissions and mitigation techniques that targeted methane and VOCs

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**January 2015:** EPA and the Administration announced a strategy to for reducing methane and VOCs from the oil and gas sector

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**March-May, 2015:** Sought input from state and local air agencies and tribes that volunteered to participate in discussions

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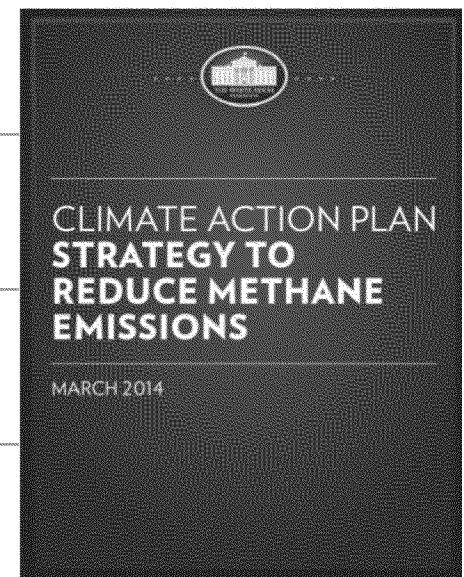
**August 18, 2015:** Proposed standards, FIP and draft Control Techniques Guidelines (CTG) announced

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**September 23 and 29, 2015:** Public hearings scheduled in Denver, Dallas and Pittsburgh

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**2016:** Issue final rules and final CTG





## Proposed Methane Challenge Program - Structure

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- Methane Challenge expands Natural Gas STAR
  - Under Natural Gas STAR, companies make general commitments and progress is tracked at program level
  - Specific, ambitious commitments
  - Transparent reporting through Subpart W of the Greenhouse Gas Reporting Program (with supplemental, voluntary reporting)
  - Company-level recognition of commitments and progress
- To enhance flexibility, propose to offer two commitment options:
  - Best Management Practice (BMP) Commitment
  - One Future Emissions Intensity Commitment
- Companies can select the option that best fits with their capabilities and corporate priorities to reduce methane emissions
- Program would cover onshore oil production and whole value chain from onshore production through distribution of natural gas



## Proposed Methane Challenge Program – Next Steps

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- EPA will be releasing documents that provide technical details of sources and proposed BMPs
- Stakeholders can provide feedback in two different ways:
  - Submit your feedback online at [www.epa.gov/gasstar/methanechallenge/](http://www.epa.gov/gasstar/methanechallenge/)
  - Send feedback by email to [methanechallenge@tetrattech.com](mailto:methanechallenge@tetrattech.com).
- Interested stakeholders can schedule a meeting with Carey Bylin at (202) 343-9669 or by email at [bylin.carey@epa.gov](mailto:bylin.carey@epa.gov)
- Please provide feedback by October 13, 2015
- EPA plans to finalize the Program later in the Fall and launch with founding partners by the end of 2015

<http://www.epa.gov/gasstar/methanechallenge/tu>



# Resources

## EPA's commitment

For information on these **proposed actions and instructions on submitting comments**, visit <http://www.epa.gov/airquality/oilandgas/actions.html>

To **register to speak at a public hearing**, visit:  
<http://www.epa.gov/airquality/oilandgas/registration.html>

To read the **Climate Action Plan – Strategy to Reduce Methane Emissions**, visit  
<https://www.whitehouse.gov/blog/2014/03/28/strategy-cut-methane-emissions>

For information on the **Natural Gas STAR Methane Challenge Program**, see:  
<http://www.epa.gov/gasstar/methanechallenge/index.html>



**To:** ona.papageorgiou@dec.ny.gov[ona.papageorgiou@dec.ny.gov];  
daunkst@pa.gov[daunkst@pa.gov]; kramamurth@pa.gov[kramamurth@pa.gov];  
rreiley@pa.gov[rreiley@pa.gov]; Michael.Hopkins@epa.ohio.gov[Michael.Hopkins@epa.ohio.gov];  
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heather.bleile@wyo.gov[heather.bleile@wyo.gov]; cole.anderson@wyo.gov[cole.anderson@wyo.gov];  
escheehl@arb.ca.gov[escheehl@arb.ca.gov]; Lia.Parisien[parisien@ecos.org];  
tmoore@westar.org[tmoore@westar.org]; Mark.Gibbs\_deq.ok.gov[Mark.Gibbs@deq.ok.gov];  
jmcDill@marama.org[jmcDill@marama.org]; tpella@censara.org[tpella@censara.org];  
tojohns@southernute-nsn.gov[tojohns@southernute-nsn.gov]; mhutson@southernute-  
nsn.gov[mhutson@southernute-nsn.gov]; dpowers@southernute-nsn.gov[dpowers@southernute-  
nsn.gov]; ethinkley@sugf.com[ethinkley@sugf.com]; joywiecks@fdlrez.com[joywiecks@fdlrez.com];  
Charlie.Lippert@millelacsband.com[Charlie.Lippert@millelacsband.com]; ryan-  
callison@cherokee.org[ryan-callison@cherokee.org]; tom-elkins@cherokee.org[tom-  
elkins@cherokee.org]; sclow@utemountain.org[sclow@utemountain.org];  
minnieg@utetribes.com[minnieg@utetribes.com]; Rosemary@alaskawild.org[Rosemary@alaskawild.org];  
leland.villalvazo@valleyair.org[leland.villalvazo@valleyair.org];  
David.Garner@valleyair.org[David.Garner@valleyair.org];  
Leonard.Scandura@valleyair.org[Leonard.Scandura@valleyair.org];  
Mike.Oldershaw@valleyair.org[Mike.Oldershaw@valleyair.org];  
aghasemi@aqmd.gov[aghasemi@aqmd.gov]; JWhynt@aqmd.gov[JWhynt@aqmd.gov];  
wthompson@aqmd.gov[wthompson@aqmd.gov]; Alan@vcapcd.org[Alan@vcapcd.org];  
tyler@vcapcd.org[tyler@vcapcd.org]; kerby@vcapcd.org[kerby@vcapcd.org];  
dans@vcapcd.org[dans@vcapcd.org]; PetriniJ@sbcapcd.org[PetriniJ@sbcapcd.org];  
GoldmanM@sbcapcd.org[GoldmanM@sbcapcd.org]  
**Cc:** Bowles, Jack[Bowles.Jack@epa.gov]; Osinski, Michael[Osinski.Michael@epa.gov]; Rupp,  
Mark[Rupp.Mark@epa.gov]; Davis, Alison[Davis.Alison@epa.gov]  
**From:** Barbery, Andrea  
**Sent:** Tue 8/18/2015 3:04:42 PM  
**Subject:** Call notes + INVITATION: Stakeholder Briefing on Reducing Emissions from the Oil & Gas  
Sector  
[Summary Methane-VOC Calls w States Tribes FINAL.docx](#)

Hello,

Thanks to all of you who shared with us your experiences regulating methane and other VOCs from the oil and gas industry. Attached are the call notes summarizing our discussions. As promised, these notes will be posted to the docket, along with the other materials related to the draft rule.

I hope you will also be able to join us **today at 12:45** for a Stakeholder Briefing, to learn about the EPA's proposal to reduce methane emissions from the oil and gas sector. You will also have

the opportunity to ask questions of senior officials about this action and its public health benefits.

We anticipate a large number of participants on this call. ***Please dial in by 12:35 p.m. EDT to ensure your participation.***

**Date:** Tuesday, August 18, 2015

**Time:** 12:45 p.m. EDT

**Participant Dial-in Number:** Ex. 6 - Personal Privacy

**Conference ID#:** Ex. 6 - Personal Privacy

Please share this invitation to others in your organization who may be interested. I will send additional information later today when it becomes available.

Again, thank you for your role in helping us craft this proposal.

Andrea Barbery

Office of Intergovernmental Relations

U.S. Environmental Protection Agency

202-564-1397

## SUMMARY

**DATE:** May 21, 2015

**SUBJECT:** Summary of Calls with State, Tribal and District Air Agencies to Discuss Air Rules and CTGs, for the Oil and Natural Gas Production, Transmission and Distribution Sector

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In February 2015, the U.S. Environmental Protection Agency (EPA or Agency) sought self-nominations from states and tribes interested in approaches the Agency could consider as it develops proposed regulations, guidelines, and voluntary approaches to address greenhouse gases (GHG) and volatile organic compounds (VOCs) in the oil and natural gas (ONG) sector. This effort is part of the strategy announced by the Obama Administration in January 2015 to address methane and smog-forming VOC emissions from the oil and gas industry. The summary that follows captures the broad themes and general comments from the participants offered during a series of teleconferences.

EPA plans to build on its 2012 New Source Performance Standards (NSPS) - 40 CFR part 60 subpart OOOO - for the ONG industry to achieve both reductions in GHGs (methane) and VOCs, and will issue a proposal in summer 2015. At the same time, EPA plans to issue draft Control Techniques Guidelines (CTGs) for controlling VOC emissions from covered ONG sources in areas where CTGs are required under the Clean Air Act (ozone nonattainment areas classified as Moderate and above, and states in the Ozone Transport Region). Both the proposed NSPS and the draft CTGs will be made available for public review and comment. EPA plans to finalize these actions in 2016. EPA also plans to expand the successful Natural Gas STAR Program by launching a new partnership in collaboration with key stakeholders by the end of 2015, with a program proposal to be issued for feedback earlier in the year.<sup>1</sup>

Participants in the outreach process included air agencies from 12 states and three tribes, along with two multi-state air organizations. Participating states were: California, Colorado, Kansas, Louisiana, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, Texas, Utah, and Wyoming. Tribal air agencies participated from the Fond du Lac Band of Lake Superior Chippewa, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe. Two multi-state organizations, the Central States Air Resources Agencies (CENSARA) and the Western Regional Air Partnership, also participated in the process.

After a kickoff call, EPA held a series of calls with the states, tribes, and state organizations to learn more about their experiences and hear their interests and concerns. Using a set of discussion questions as a guide, EPA sought and compiled feedback. This document summarizes the broad themes raised during those discussions.

### **Question 1: Are you considering regulating, or have you regulated new or existing sources of upstream oil and gas air emissions?**

The majority of states are regulating new sources of upstream ONG air emissions through permitting, while other states are relying primarily on subpart OOOO to regulate ONG facilities. One state noted that

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<sup>1</sup> EPA released the Natural Gas STAR Methane Challenge Program proposal in July 2015. Details are available at <http://www.epa.gov/gasstar/methanechallenge/index.html>

it revises its permitting guidance periodically to capture new sources and to require controls on existing permitted sources in nonattainment areas.

All Tribal air agencies have considered regulating new and/or existing upstream ONG air emissions. One tribe noted it recently developed an air quality monitoring program to monitor criteria pollutants and ozone precursors.

**Question 2 – What pollutants are the focus of your regulations or deliberations (e.g., VOCs, hazardous air pollutants (HAPs) or methane)?**

The majority of states identified VOCs as a focus, though not exclusively, and some states listed HAPs as being of particular interest (New York, Ohio, Pennsylvania, and Wyoming). A number of states, including Colorado and Pennsylvania, specifically regulate methane, while other states control methane through VOC rules. Texas noted that it addresses criteria pollutants, hydrogen sulfide, and benzene through emissions limits in its oil and gas standard permit used primarily in the Barnett Shale, for example, and has rules focusing on emissions of particulate matter, nitrogen oxides, VOCs, and sulfur compounds in nonattainment and certain other areas. Other states do not regulate methane but may consider it in the future. Kansas regulations do not focus on any particular pollutant.

Tribal air agencies listed VOCs, HAPs, and methane as concerns, in addition to suspended particles. They are interested in ways to reduce these emissions. One tribe has not considered VOC or methane emission regulations because there is both a New Source Review (NSR) program and an NSPS (subpart OOOO) for ONG sources in place.

A tribe stated that all pollutants listed in the question are a concern, methane in particular, due to climate change issues. Under the Part 70 program, the Southern Ute Indian Tribe have regulations for current NSPS and National Emission Standards for Hazardous Air Pollutants (NESHAP) standards. Another tribe is focused on monitoring suspended particulates to monitor for radionuclides.

**Question 3 – What are the types of sources you are regulating/considering regulating? Have you considered regulating sources identified in the EPA’s White Papers?**

The types of sources regulated, or being considered for regulation, vary among states. Texas, for example, stated that any oil and gas source of emissions other than methane, ethane, and carbon dioxide, requires authorization, in addition to having to meet requirements of any applicable NSPS or National Emissions Standard for Hazardous Air Pollutants. In addition, most states, such as Louisiana, New York<sup>2</sup>, Ohio, Pennsylvania, Utah, and Wyoming, and California’s air districts, regulate storage tanks in addition to wellheads. Colorado regulates hydraulically fractured gas and oil wells and venting from storage tanks, equipment leaks at the well site and compressor stations; pneumatic controllers, compressor engines, dehydrators, liquids unloading and well maintenance activities, and separators at well production sites are regulated, but not pneumatic pumps. Several states noted that they regulate compressors (New York, North Dakota, Ohio, and Pennsylvania). North Dakota regulates compressors for NO<sub>x</sub> and CO, emissions from completions and ongoing production of hydraulically fractured oil wells, leaks, and liquids unloading, while pneumatic devices remain under EPA authority.

Some states are considering regulating sources identified in the EPA’s White Papers, with states specifically mentioning onsite tanks at oil fields, equipment leaks, pneumatic pumps and controllers, and compressors, but implementing new regulations is limited by available resources. Other states do not regulate facilities beyond federal requirements, but may consider new sources such as compressor engine

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<sup>2</sup> New York regulates some storage tanks, but not all of them.

controls if there are new nonattainment designations.

Among the Tribal air agencies, the Southern Ute regulates compressor stations and processing plants. The Fond du Lac Band has a compressor on the Reservation that receives its Title V permit from EPA, but the Band does not have independent regulatory authority at this time.

**Question 4 – Have you regulated or considered regulating both new and existing sources? If so, which factors did you consider in determining whether to regulate both? Did any factors present particular challenges?**

California, Pennsylvania, and Louisiana regulate both new and existing sources, while Wyoming regulates new and existing sources in nonattainment areas. Ohio regulates new sources exclusively, while other states regulate new and “modified” existing sources (Oklahoma, Texas, and Utah). Kansas has not considered regulating new or existing sources unless already subject to a federal rule.

Regarding challenges, California said federal methane rules would need to harmonize with existing local air districts’ VOC rules and a planned statewide methane regulation for the ONG sector may overlap with local rules for tanks, which will pose implementation challenges. California also noted that the transmission, storage, and distribution segments are currently unregulated for air quality purposes in that state, so imposing methane regulations on these segments may place a significant burden on smaller Air Pollution Control Districts (APCDs). Colorado’s challenges include cost-effectiveness of controls, size of operations, effects on nonattainment areas, technical feasibility, existing controls in industry, and proximity to buildings and human activities. Some states cited issues surrounding accurately identifying pneumatic devices in the field. Wyoming said cost-effectiveness is problematic for new sources because higher costs may be economical in nonattainment areas but not in other areas of the state. Further, pneumatic pumps are a significant source of emissions, but with no source classification code (SCC) for these devices, it is difficult to track emissions. Other states challenges include the quantity of permit applications, the quantity of new wells coming online, and the lack of gas collection infrastructure.

Tribal air agencies have considered regulating new and existing sources, but are still in the developmental stage.

**Question 5 – Do the requirements vary by region or are they uniform across the state? If they vary, were there specific activities or reasons that the requirements vary?**

Kansas, New York, North Dakota, Oklahoma, and Pennsylvania reported uniform regulations statewide. Other states reported general statewide uniformity with some variations, including different requirements for nonattainment areas (e.g., Colorado, Louisiana, Texas, Wyoming), different compliance dates (e.g., Utah), concentrated development areas (e.g., Texas and Wyoming), and major source NSR trigger (e.g., Ohio). California’s air districts have similar, but not uniform, rules.

Among Tribal air agencies, the Ute Mountain Ute Tribe stated the resource protection goals of the tribal council will drive any variation in regulations. The Fond du Lac Band does not have regulations.

**Question 6 – Have you identified innovative compliance options that reduce the implementation burden for the state?**

The participants discussed several compliance options, such as leak detection and repair (LDAR), optical gas imaging (OGI) monitoring, and the use of general permitting to reduce burden on states and facilities. One state mentioned looking at options for LDAR including using an infrared (IR) camera to identify

leaks with more frequent surveys. TCEQ, for example, noted that Texas uses IR cameras as a screening tool, both on the ground and from the air. Other states are also considering developing performance standards rather than specifying control technologies. One state described their forward-looking infrared (FLIR) program. Colorado, Ohio, and Pennsylvania also noted the efficacy of streamlined permitting requirements and processes.

Among the Tribal air agencies, the Southern Ute are developing streamlined reporting mechanisms that include an interactive online database of regulated sources in which sources can report compliance information.

#### **Question 7 – What has been your experience implementing Control Technique Guidelines (CTGs)?**

While a number of states reported some experience implementing CTGs (e.g., California’s air districts, Ohio, Pennsylvania, Texas, and Utah) to varying degrees, other states (e.g., California, Colorado, and Louisiana) said their experience has been very limited. Most of Colorado’s CTGs came out in the 1990s. Kansas and Oklahoma had no experience with CTGs applicable to the ONG industry.

Pennsylvania noted that they are just completing the regulatory process for CTGs issued in 2008; a process that could be faster if they had model rule language in the CTG. Utah has used CTGs in the development of their PM<sub>2.5</sub> State Implementation Plan (SIP) to inform the inventory process and to help define area source controls. Utah noted that even though the CTG documents are often out of date, it is a helpful starting point. They have used CTGs as the basis of information documents made available online, such as voluntary control measures for pollutants.

None of the Tribal air agencies noted any experience implementing CTGs.

#### **Question 8 – As the EPA develops a CTG for sources of oil and gas emissions, what information and/or features would you like us to consider including (such as detailed cost information)? Is model rule language something that you would find helpful?**

The vast majority of states noted that model rule language would be helpful, although some states said use of the model language should be optional. Other states wanted to review the CTG before providing comment. New York, Ohio, and Utah also considered cost information to be helpful. New York and Ohio added that clear definitions would be helpful, with New York noting it would be useful to specify applicability by SCC code. Colorado said the CTG should include a mechanism that recognizes current state requirements to minimize conflicts between federal and state rules on the same sources. The CTG should also clearly define the first day of operation or commencement of operation as it pertains to drilling or otherwise stimulating a well. Pennsylvania requested the CTG include alternative compliance methods, particularly ones that reduce the burden on small businesses. Texas agreed that a model rule would be helpful, but requested that the CTG include sufficient time (more than one year) to plan and adopt rules into a SIP. Texas requested that the CTG help clarify applicability by including a statement outlining how each source type would be affected. Texas also requested the EPA use current cost information for recommended controls, including estimates of the cost of equipment and controls, and not “scale up” based on older estimates of nationwide compliance costs. Wyoming would like the CTG to address VOC and methane separately, not grouped together as hydrocarbons, as well as include a technical feasibility analysis taking into account different types of developments and avoids a “one size fits all” approach.

Of the Tribal air agencies, Fond du Lac stated if there is a co-benefit of controlling a second pollutant as a result of a regulation directly controlling a first pollutant, then it would be helpful to see that addressed in

the cost analysis. The Southern Ute believed it would also be helpful to account for the cost of climate change in the cost analysis. The Ute Mountain Ute stated the cost savings resulting from capturing otherwise vented gas should be presented.

**Question 9 – Do you think any sources of emissions are particularly amenable to voluntary rather than regulatory action? Do you have any state-specific voluntary programs that we should be aware of?**

Nine of the states (California, Colorado, Kansas, Louisiana, New York, North Dakota, Oklahoma, Texas, and Wyoming) said they have no state-specific voluntary programs in place and most did not believe such programs would be useful or accepted by industry. One state, however, suggested that pneumatic devices and their associated maintenance requirements would be a good place for voluntary measures, as well as a voluntary program to institute best management practices (BMP) for liquids unloading and well maintenance. Another state also recommended that pneumatic controllers and pneumatic pumps might be appropriate, as they are aware of voluntary measures in other places, though they themselves had no voluntary programs.

Ohio, Pennsylvania, and Utah each have voluntary programs. Ohio has a voluntary program for HAP emissions in which companies can receive public recognition for voluntary reductions. Pennsylvania relies on the Natural Gas STAR program for information about voluntary programs and they use this information to help determine the best available control technology (BACT). Utah said emission controls in the Uinta Basin began with the Ozone Advance program that included voluntary proactive measures. Utah said a benefit of voluntary measures is that they are quick to implement. The state can monitor the effectiveness of the voluntary measure and get feedback from industry before moving it into a rule.

None of the Tribal air agencies have voluntary programs.

**Follow-Up Call with California Air Districts**

On April 23, 2015, EPA held a follow-up call with several California air districts (San Joaquin Valley APCD, South Coast Air Quality Management District, Ventura County APCD and Santa Barbara County APCD) to discuss their experiences with CTGs. The following is a summary of that discussion.

**Have you implemented the oil and gas CTG from the 1980s?**

All the districts (San Joaquin, South Coast, Ventura County and Santa Barbara) stated they have implemented the CTG through their own mature air programs; most of which have been in existence for decades. San Joaquin and Santa Barbara specifically noted that their own rules and regulations go beyond what the existing CTG requires.

**Are there lessons learned that would be helpful for us as we draft the new CTG?**

San Joaquin said they cooperate closely with industry associations, citizen advisory committees, agricultural groups, and others, and recommended that EPA do the same. South Coast and Ventura County noted the importance of urbanization and sensitivity receptors; the age of a facility and its proximity to homes needs to be kept in consideration. Santa Barbara added that some new measurement devices – such as optical gas imaging cameras – can be too expensive for a district and recommended that the CTG should not mandate monitoring equipment that districts do not currently use and cannot afford.

**Do you have experience in implementing CTGs that included model rules? How does this affect**

## **implementation?**

Among the air agencies, Santa Barbara stated they have implemented model rules which were helpful, such as the model rule in EPA's CTGs for degreasers. All districts agreed that model rules could be helpful. South Coast and Ventura County added that it would be helpful if model language included the flexibility to allow a district to make it workable with their needs, such as an equivalency demonstration. Additionally, Ventura County noted that implementing the CTG will be smoother if the CTG is consistent with the new CARB rule. Santa Barbara added they would be interested in implementing a new CTG, only if it adds to what the district requires in its existing program, such as more stringent control requirements, improved monitoring, etc.

## **Outside of the CTG, have you applied RACT-like measures to oil and gas sources in your district? If so, what types of measures did you apply? What worked well? What did not?**

San Joaquin has applied RACT (or beyond RACT measures) from crude oil wells to processing and handling. The South Coast stated it is helpful to have a robust compliance plan and try to steer away from flares and concentrate on reinjection and other non-NOx forming control technologies. Ventura County requires a vapor recovery system; NOx rules apply at low levels in oil fields. The Santa Barbara District noted a focus that includes tanks, loading racks, steam generators, and small boilers. They have minor leak rules and require vapor recovery for tanks with no venting of gas during testing.

## **Do you foresee any challenges in implementing a new oil and gas CTG in your district?**

None of the California air districts anticipated major challenges in implementing a new oil and gas CTG. All concurred that an equivalency demonstration would be helpful. South Coast reiterated its concern that multilevel controls and regulations not interfere with one another. Ventura County added that regulating something not currently regulated must be done carefully with feedback from the districts. The district stressed the importance of clear requirements, especially with regard to sources such as temporary production tanks.

## **Other information districts would like to see the CTG include?**

San Joaquin would like to see any information that justifies the assumptions being made or the reasoning behind any requirements. San Joaquin and South Coast believed cost information would be helpful, as an aid in understanding why a specific requirement is being put in place. The San Joaquin District said that if the EPA is looking for detailed cost information, the District has a BACT NSR regulation that can provide such details to the EPA through their BACT analyses and permitting processes. South Coast also stated that new technology information would be very useful. Santa Barbara said it would be beneficial for the CTG to include an inventory of what is out there, such as equipment counts and control technologies.



**To:** Rubin, Jake[JRubin@aga.org]  
**Cc:** DeLuca, Isabel[DeLuca.Isabel@epa.gov]  
**From:** Pryor, Justin  
**Sent:** Tue 3/22/2016 5:23:49 PM  
**Subject:** RE: Methane Challenge Launch Event

Hi Jake,

Here's what we're thinking in terms of media outreach on our end:

We plan to issue a press release at 11AM after the Launch Event, we may have some social media and a blog, as well, and we will be recognizing all our founding partners on the Methane Challenge website.

If you want to chat further we can set up a meeting with our comms people, and Isabel Deluca (cc'd) may be able to assist with that.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Rubin, Jake [mailto:JRubin@aga.org]  
**Sent:** Tuesday, March 22, 2016 12:54 PM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Subject:** RE: Methane Challenge Launch Event

Hey Justin,

Who should I talk to about media outreach?

Thanks,

Jake

**Jake Rubin | Director, Public Relations**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7027 | M: 202-841-2940 | F: 202-824-9106 | [jrubin@aga.org](mailto:jrubin@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to nearly 69 million customers throughout the nation.

**From:** Pryor, Justin [mailto:Pryor.Justin@epa.gov]  
**Sent:** Tuesday, March 22, 2016 12:24 PM  
**To:** Lacey, Pam <PLacey@aga.org>  
**Cc:** Bylin, Carey <Bylin.Carey@epa.gov>; Rubin, Jake <JRubin@aga.org>; Traweck, Lori <LTraweck@aga.org>  
**Subject:** RE: Methane Challenge Launch Event

Hi Pam,

Hope the below helps, but again, let me know if there is anything further info you or the speakers might need.

With regard to the first three bulleted questions, I'll refer to the draft Event Agenda:

**10:00 AM -10:05 AM      Welcome remarks (Janet McCabe)**

**10:05 AM -10:15 AM      Brief Remarks from Supportive Industry Associations**

American Gas Association (AGA)

Downstream Initiative (DSI)

**10:15 AM - 10:35 AM      Introduce Program Partners**

**10:35 AM – 10:40 AM      Closing remarks**

**10:40 AM - 10:45 AM      Group Photo**

The length of the event will be 45 minutes, and structured as indicated above. Ms. McCabe will provide the opening remarks, which will last at most 5 minutes. Due to the time constraints, AGA and Downstream Initiative will both have 5 minutes each to speak.

We are planning for the company reps to provide us with a short (75 word) bio describing their company, their commitment(s), and reasons for becoming program partners, and each one of those will be read during the “Introduce Program Partners” time slot. We are planning to have company representatives come on stage for individual photos as their bios are read. We are mindful of timing for this, and hence are keeping the bios very short, but also need to balance the fact that individuals will be traveling for this and we want to give them appropriate recognition for participating.

Finally, all individuals that plan to attend the launch event should register for the GMF. Registration is free and there is no requirement to attend any other conference events. We will have specific logistical information for participants available when they pick up their nametags at registration.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Lacey, Pam [<mailto:PLacey@aga.org>]

**Sent:** Friday, March 18, 2016 5:11 PM

**To:** Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>

**Cc:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>; Rubin, Jake <[JRubin@aga.org](mailto:JRubin@aga.org)>; Traweek, Lori <[LTraweek@aga.org](mailto:LTraweek@aga.org)>

**Subject:** RE: Methane Challenge Launch Event

Justin – Yes, Ralph LaRossa is definitely planning to attend and to give some remarks. We actually had interest from a second CEO, our Board First Vice Chair and CEO of ONE Gas Pierce Norton. But if we only have 5 minutes for AGA remarks, I think I should probably find out if he still wants to come to DC. I have copied Jake Rubin our communications director – as Jake will likely draft the remarks. He can figure out which portion would be for Mr. LaRossa and which for Ms. Traweek.

•□□□□□□□ Could you give me a rough idea of how the event is likely to be structured? About how long will it be in total? An hour?

- Do you plan to have other industry *speakers*?
  
- How long do you plan for Air Administrator Janet McCabe to speak (and/or Administrator McCarthy if she drops in)?
  
- Do you plan to have company reps troop across the stage to collect their certificates like a graduation? (hope not – that would be deadly dull) I think reading the names and having them printed – along with a group photo for each group would keep it crisp while providing acknowledgement. (e.g. AGA & member distribution companies in one photo, INGAA pipelines, ONE Future if they are ready...) We could arrange for individual company photos after the main launch event.
  
- Just to confirm – Founding Partners etc. can come to just the launch event without having to register for the whole Global Methane conference, correct?

- Thoughts? Thanks! - Pam

**Pamela A. Lacey | Chief Regulatory Counsel**

**Office of General Counsel**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7340 | M: 202-809-6565 | F: 202-824-9190 | [placey@aga.org](mailto:placey@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to over 69 million customers throughout the nation.

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]  
**Sent:** Friday, March 18, 2016 4:27 PM  
**To:** Lacey, Pam <[PLacey@aga.org](mailto:PLacey@aga.org)>  
**Cc:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** Methane Challenge Launch Event

Hi Pam,

So March 30<sup>th</sup> is coming quick, and we are trying to tie up all of our launch event bows.

AGA is one of those bows! As previously discussed, we welcome some brief remarks from AGA during the event. Due to time constraints, we are looking to limit these remarks to a maximum of 5 minutes. As far as content goes, we would appreciate it if AGA could share the planned remarks with us prior to the event for our awareness (if possible, by March 23). Can you confirm that Ralph LaRossa and Lori Traweek are still planned to speak (or if the time constraint may make it difficult for both to speak)?

Our agenda at this point is as follows (it has been evolving, but if further changes are made that may affect AGA, we will be sure to share with you):

**Agenda:**

**10:00 AM -10:05 AM      Welcome remarks**

**10:05 AM -10:15 AM      Brief Remarks from Supportive Industry Associations**

**American Gas Association (AGA)**

**Downstream Initiative (DSI)**

**10:15 AM - 10:35 AM    Introduce Program Partners**

**10:35 AM – 10:40 AM    Closing remarks**

**10:40 AM - 10:45 AM    Group Photo**

Please do not distribute this draft agenda, as we intend to send a final, detailed version to all companies attending. Please let me know if you have any questions, and have a great weekend!

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**To:** Subbotin, Melissa[MVSN@pge.com]  
**From:** DeLuca, Isabel  
**Sent:** Wed 3/30/2016 1:23:34 PM  
**Subject:** RE: Draft Quote

Hi Melissa,

Apologies for the late note, but we just noticed one thing in your PR, if it's not too late. You say that PG&E is "...joining with 41 other U.S. companies" in Methane Challenge. The total number, including PG&E, is 41, so I believe you want to say that PG&E is "joining with 40 other U.S. companies."

A slight distinction, but we thought you might want to correct if there is still time.

Thanks!

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Subbotin, Melissa [mailto:MVSN@pge.com]  
**Sent:** Tuesday, March 29, 2016 5:05 PM  
**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** RE: Draft Quote

This is terrific. Thank you Isabel!



**From:** DeLuca, Isabel [mailto:DeLuca.Isabel@epa.gov]  
**Sent:** Tuesday, March 29, 2016 1:40 PM  
**To:** Subbotin, Melissa  
**Subject:** RE: Draft Quote

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

\*\*\*\*\*

Hi Melissa,

Thanks for sending the press release! I apologize for the delay on the quote – here is one that has been approved:

“The Natural Gas Methane Challenge is an integral part of the EPA’s and the Administration’s ongoing commitment to address methane emissions and global climate change,” said Janet McCabe, Acting Assistant Administrator for the Office of Air and Radiation at the Environmental Protection Agency [or EPA]. “We are pleased that PG&E is stepping up to join this effort as a founding partner, committing to technologies, strategies, and practices, to reduce their emissions and setting the example of a more sustainable path for their peers.”

Over here, we are planning a press advisory at 8 or 8:30 am, and planning to issue a press release at 11 am, followed by some social media.

Thanks again, and please let me know if you have any questions.

Isabel

Isabel DeLuca

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Subbotin, Melissa [<mailto:MVSN@pge.com>]

**Sent:** Tuesday, March 29, 2016 12:26 PM

**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>

**Subject:** RE: Draft Quote

Hi Isabel,

Sorry for the delay in getting this over to you, our internal subject matter experts were reviewing and I wanted to be sure to get you the most up to date version, which is attached.

-Melissa

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]

**Sent:** Tuesday, March 29, 2016 6:55 AM

**To:** Subbotin, Melissa

**Subject:** RE: Draft Quote

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

\*\*\*\*\*

Hi Melissa—

Do you think we could see a copy of the press release? Our press office prefers to see the context where a quote will be used before they sign off on the quote.

Thanks,  
Isabel

**Isabel DeLuca**

Climate Change Division, US EPA

(202) 343-9247

**From:** DeLuca, Isabel  
**Sent:** Monday, March 28, 2016 5:34 PM  
**To:** 'Subbotin, Melissa' <[MVSN@pge.com](mailto:MVSN@pge.com)>  
**Subject:** RE: Draft Quote

Great. Sorry not to be more specific about our release time—we'll be issuing it at 11 am EDT on 3/30.

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Of course and thank you for sharing. We are not releasing ours until 9PDT/12EDT on Wednesday at the earliest.

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**To:** Subbotin, Melissa

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Yes, the total number of founding partners is 41. We'd like to keep that embargoed until our press release is issued at 11 am.

Thanks!

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Hi Isabel,

I'm filling in for Stephanie while she's out over the next couple of days. While we await approval of a quote for our release, can you tell me how many other partners there are in the new Methane Challenge?

Thanks,

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**From:** Dell, Stephanie  
**Sent:** Monday, March 28, 2016 2:07 PM  
**To:** Subbotin, Melissa; Stimmel, Nick  
**Subject:** Fwd: Draft Quote

FYI

Sent from my iPhone

Begin forwarded message:

**From:** "DeLuca, Isabel" <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Date:** March 28, 2016 at 2:05:55 PM PDT  
**To:** "Dell, Stephanie" <[S3DD@pge.com](mailto:S3DD@pge.com)>  
**Subject:** RE: Draft Quote

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**Isabel DeLuca**

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This version of the quote is slightly modified. Please use this one.

“The Natural Gas Methane Challenge is an integral part of the EPA’s and the Administration’s ongoing commitment to address methane emissions and global climate change. We are pleased that PG&E is stepping up to join this effort as a founding partner; it demonstrates their commitment to conservation and genuine concern for the environment,” said NAME, TITLE, EPA.

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Friday, March 25, 2016 2:19 PM  
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PG&E's commitment to the methane challenge. Our release is still being routed for approvals internally, but I wanted to get the draft quote to you ASAP.

Please let me know if we're approved to use it or if you'd like to make any changes. I look forward to hearing back from you.

"The Methane Challenge Program is an integral part of the EPA's and the Administrations ongoing commitment to address methane emissions and global climate change. We are pleased that PG&E is stepping up to join this effort as a founding partner, it demonstrates their commitment to conservation and genuine concern for the environment," said NAME, TITLE, EPA.

Thanks,

Stephanie

Stephanie Dell | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)



**To:** Subbotin, Melissa[MVSN@pge.com]  
**From:** DeLuca, Isabel  
**Sent:** Tue 3/29/2016 8:40:00 PM  
**Subject:** RE: Draft Quote

Hi Melissa,

Thanks for sending the press release! I apologize for the delay on the quote – here is one that has been approved:

“The Natural Gas Methane Challenge is an integral part of the EPA’s and the Administration’s ongoing commitment to address methane emissions and global climate change,” said Janet McCabe, Acting Assistant Administrator for the Office of Air and Radiation at the Environmental Protection Agency [or EPA]. “We are pleased that PG&E is stepping up to join this effort as a founding partner, committing to technologies, strategies, and practices, to reduce their emissions and setting the example of a more sustainable path for their peers.”

Over here, we are planning a press advisory at 8 or 8:30 am, and planning to issue a press release at 11 am, followed by some social media.

Thanks again, and please let me know if you have any questions.

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Stephanie

**Stephanie Dell** | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)



**To:** esther\_au@transcanada.com[esther\_au@transcanada.com]  
**From:** DeLuca, Isabel  
**Sent:** Tue 3/29/2016 8:04:12 PM  
**Subject:** FW: Methane Challenge Follow-Up

Hi Esther,

Elina forwarded me your email—I'm helping to manage communications around the Methane Challenge Launch. Apologies for the delay in responding!

Tomorrow we are planning on issuing a press advisory at 8 or 8:30 am. That will include an announcement about the Methane Challenge launch and also announce that our Administrator is speaking at a later event.

We're planning to issue a press release at 11 am, followed by social media (including a blog).

Hope this helps with your timing. If you have any questions, please let me know.

Best wishes,

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

Begin forwarded message:

**From:** Esther Au <[esther\\_au@transcanada.com](mailto:esther_au@transcanada.com)>  
**Date:** March 29, 2016 at 2:28:00 PM EDT  
**To:** "[elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)" <[elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)>  
**Subject:** FW: Methane Challenge Follow-Up

Hi Elina,

I received the below email from a colleague and as I work on the communications team at TransCanada, I was wondering what your plans are for the launch event this Wednesday. Are you issuing a news release, doing anything on social media, etc. that our digital team could monitor and share accordingly?

We're interested in following the event on our end and any information would be much appreciated.

Thank you,

Esther

---

**Esther Au**  
Communications Specialist, Corporate Communications & Marketing  
[esther\\_au@transcanada.com](mailto:esther_au@transcanada.com)

450 - 1st Street SW  
Calgary, Alberta, Canada, T2P 5H1

**Tel:** (403) 920-6772  
**Mobile:** (403) 401-6577



---

[LinkedIn](#) | [Twitter](#) | [Website](#)

**From:** Andrea Jalbert  
**Sent:** Thursday, March 24, 2016 3:41 PM  
**To:** Kristine Delkus  
**Subject:** FW: Methane Challenge Follow-Up

We are now part of the EPA Natural Gas STAR Methane Challenge Program. Brandon, Randy, Corey, Vern and I were all supportive. Jim Cormack will go on our behalf given availability of other folks and as he is very familiar with the process and other people who will be there.

Begin forwarded message:

**From:** Elina Bouloubasis <[Elina.Bouloubasis@erg.com](mailto:Elina.Bouloubasis@erg.com)>  
**Date:** March 23, 2016 at 4:13:57 PM MDT  
**To:** "[jim\\_cormack@transcanada.com](mailto:jim_cormack@transcanada.com)" <[jim\\_cormack@transcanada.com](mailto:jim_cormack@transcanada.com)>, "[randall\\_schmidgall@transcanada.com](mailto:randall_schmidgall@transcanada.com)" <[randall\\_schmidgall@transcanada.com](mailto:randall_schmidgall@transcanada.com)>, "[chad\\_edwards@transcanada.com](mailto:chad_edwards@transcanada.com)" <[chad\\_edwards@transcanada.com](mailto:chad_edwards@transcanada.com)>  
**Cc:** "Bylin, Carey" <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>, "Pryor, Justin" <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>  
**Subject:** Methane Challenge Follow-Up

Dear Mr. Cormack, Mr. Schmidgall, and Mr. Edwards,

Congratulations! On behalf of the U.S. Environmental Protection Agency (EPA), I am pleased to welcome you to the Natural Gas STAR Methane Challenge Program. The Partnership Agreement between your company and the U.S. EPA signifies your intent to undertake and document ambitious voluntary methane emission reductions. We will be countersigning the Partnership Agreement and providing you with a final version shortly.

In addition, thank you for sending the requested information to us. If you're able to attend the [launch](#) event next week, we still need the following items from you:

- Launch participant's name, title, and contact information
- Short bio (approximately 75 words) describing your company, commitments, and highlighting reasons for becoming a Methane Challenge Partner

- Company website and company name that should be listed on our website

Please be sure to provide these items to me ([Elina.bouloubasis@erg.com](mailto:Elina.bouloubasis@erg.com)) **as soon as possible.**

Below is the Launch Event Agenda for an understanding of how the event will be structured.

## Methane Challenge Program Launch Event

**When:** **Wednesday, March 30, 2016, 10:00-10:45AM**

**Global Methane Forum Plenary Session, immediately following Policy Roundtable: Different Approaches to Methane Policies 08:30-10:00AM)**

*\*Reserved seating at the front of the room for Methane Challenge Founding Partners.*

**Where:** **Georgetown University Hotel and Conference Center**

**Washington, DC**

### **Agenda:**

**10:00 AM -10:05 AM    Welcome remarks**

*Janet McCabe, Acting Assistant Administrator for Air and Radiation, US EPA*

**10:05 AM -10:15 AM    Brief Remarks from Supportive Industry Associations**

*American Gas Association (AGA)*

*Downstream Initiative*

**10:15 AM - 10:35 AM    Introduce Program Partners**

*Introduce each partner in alphabetical order.*

*Read brief partner statements (30 seconds pre partner) that summarizes the company's business and their planned commitment as a Methane Challenge partner. While the short company statement is being read, each partner representative walks on stage and shakes hands with Janet McCabe [pause for individual photo]*

**10:35 AM – 10:40 AM    Closing remarks**

**10:40 AM - 10:45 AM    Group Photo**

*Group photo (all companies) with Janet McCabe on the stage*

Additionally, from 12:30 - 1:30 pm, there will be an informal opportunity for you to discuss the Methane Challenge with EPA representatives—we hope you can attend! (The location will be announced at the Launch Event.)

If you haven't yet registered for the Global Methane Forum, please do so as soon as possible at <http://globalmethane.org/forum/>. On the day of the event, staff will be available at the registration desk to answer questions and provide assistance.

Please feel free to contact Carey Bylin (202-343-9669 or [bylin.carey@epa.gov](mailto:bylin.carey@epa.gov)) or Justin Pryor (202-343-9258 or [pryor.justin@epa.gov](mailto:pryor.justin@epa.gov)) with any questions about the Methane Challenge Partnership and contact Elina Bouloubasis (703-373-0149

or [elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)) with any questions about the launch event.

Thank you again for your support of the Methane Challenge Program and we look forward to working with you.

Sincerely,

Elina Bouloubasis

ERG - Contractor Support to the

EPA's Methane Challenge Program

We respect your right to choose which electronic messages you receive. To stop receiving this message and similar communications from TransCanada PipeLines Limited please reply to this message with the subject "UNSUBSCRIBE". This electronic message and any attached documents are intended only for the named addressee(s). This communication from TransCanada may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message. Thank you. Nous respectons votre droit de choisir quels messages électroniques vous désirez recevoir. Pour ne plus recevoir ce message et les communications similaires, de la part de TransCanada PipeLines Limited, veuillez répondre à ce message en inscrivant dans l'objet « SE DÉSINSCRIRE ». Ce message électronique et tous les documents joints sont destinés exclusivement au(x) destinataire(s) mentionné(s). Cette communication de TransCanada peut contenir des renseignements privilégiés, confidentiels ou par ailleurs protégés contre la divulgation; ils ne doivent pas être divulgués, copiés, communiqués ou distribués sans autorisation. Si vous avez reçu ce message par erreur, veuillez en avertir immédiatement l'expéditeur et détruire le message original. Merci

**To:** BTylor@washgas.com[BTylor@washgas.com]  
**From:** DeLuca, Isabel  
**Sent:** Tue 3/29/2016 7:47:36 PM  
**Subject:** FW: Methane Challenge - Washington Gas - Press Release Q's  
Release - final.docx

Hi Bernie,

Carey Bylin forwarded me your email—thanks so much for sharing your press release with us and apologies for the delayed reply. We thought your release looked great, and just had two small suggestions, to capitalize Janet McCabe's title, and one word edit below:

The EPA Methane Challenge provides a mechanism for natural gas and other energy companies to make and track commitments established in collaboration with the EPA to lower methane emissions that improve air quality. It is a voluntary program designed for participants that submit meaningful and ambitious methane reduction goals commitments and are prepared to transparently account for progress and demonstrate ongoing improvements.

As for our timing tomorrow, we're scheduled to publish our press release at 11 am. We may also issue a press advisory about the launch event at 8 or 8:30 in the morning. We're hoping to follow the press release with some social media, including a blog.

Please let me know if you have any questions, and thanks again for reaching out.

Best regards,

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Tylor, Bernie [<mailto:BTylor@washgas.com>]  
**Sent:** Tuesday, March 29, 2016 11:05 AM  
**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>; Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>;  
[Elina.Bouloubasis@erg.com](mailto:Elina.Bouloubasis@erg.com)  
**Subject:** Methane Challenge - Washington Gas - Press Release Q's

Hi Carey, Justin and Elina:

As a quick introduction, I'm with the Corp Comms team at WGL, and am reaching out about the participation of Washington Gas in the EPA Methane Challenge. Melissa Adams and her team are our main internal contacts and we're very excited.

A couple areas I wanted to bring to your attention/clarify:

Wanted to provide a courtesy head up that we plan to issue a press release tomorrow -

•□□□□□□□ So that we are careful about timing of when we issue it, when do you plan to issue your press release? Ie., we'd release ours after yours

I'll follow up with a phone call too to introduce myself. I know that it must be very busy this close to the event. Looks like it will be a top notch launch. Thanks for your input, Bernie

Bernie Tylor

WGL

Manager - Media Relations

101 Constitution Avenue, NW



Washington, DC 20080

202-624-6778 (office)

(b)(6) personal privacy (mobile)

[btylor@washgas.com](mailto:btylor@washgas.com)

**From:** Elina Bouloubasis [<mailto:Elina.Bouloubasis@erg.com>]

**Sent:** Wednesday, March 23, 2016 5:43 PM

**To:** Adams, Melissa E <[MelissaAdams@washgas.com](mailto:MelissaAdams@washgas.com)>

**Cc:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>; Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>; Dallas, Sarah <[SDallas@washgas.com](mailto:SDallas@washgas.com)>; Kelly, Hillery A <[HKelly@washgas.com](mailto:HKelly@washgas.com)>

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**10:40 AM - 10:45 AM    Group Photo**

*Group photo (all companies) with Janet McCabe on the stage*

Additionally, from 12:30 - 1:30 pm, there will be an informal opportunity for you to discuss the Methane Challenge with EPA representatives—we hope you can attend! (The location will be announced at the Launch Event.)

If you haven't yet registered for the Global Methane Forum, please do so as soon as possible at <http://globalmethane.org/forum/>. On the day of the event, staff will be available at the registration desk to answer questions and provide assistance.

Please feel free to contact Carey Bylin (202-343-9669 or [bylin.carey@epa.gov](mailto:bylin.carey@epa.gov)) or Justin Pryor (202-343-9258 or [pryor.justin@epa.gov](mailto:pryor.justin@epa.gov)) with any questions about the Methane Challenge Partnership and contact Elina Bouloubasis (703-373-0149 or [elina.bouloubasis@erg.com](mailto:elina.bouloubasis@erg.com)) with any questions about the launch event.

Thank you again for your support of the Methane Challenge Program and we look forward to working with you.

Sincerely,

Elina Bouloubasis

ERG - Contractor Support to the

EPA's Methane Challenge Program



News Media:  
Bernie Tylor

btylor@washgas.com  
202-624-6778

Financial Community:  
Douglas Bonawitz  
624-6129

## **Washington Gas Joins the EPA's Natural Gas STAR Methane Challenge Program as Founding Partner**

WASHINGTON (March 30, 2016) – Washington Gas, a WGL company (NYSE: WGL), announced today that it has joined the U.S. Environmental Protection Agency's (EPA) Natural Gas STAR Methane Challenge Program as a founding partner. This voluntary program provides participating companies with a platform to showcase their efforts to reduce methane emissions and improve air quality.

By joining the EPA's Methane Challenge Program, Washington Gas demonstrates its ongoing commitment to greenhouse gas (GHG) emission reduction. This commitment includes a goal to achieve by 2020 an 18 percent reduction in GHG emissions for every unit of natural gas delivered. Established in 2011 against a 2008 GHG emission baseline, the company is on track to meet this objective.

"WGL has a strong commitment to sustainability as a core company value," said Terry McCallister, chairman and CEO of WGL Holdings, Inc and Washington Gas. "We demonstrate this commitment by establishing aggressive emission reduction objectives for our own operations and by offering our customers energy answers from a well-balanced portfolio that includes renewable solutions, energy efficiency services and green power."

Washington Gas has also established a goal to reduce GHG emissions from its fleet and facilities operations by 70 percent by 2020. The company expects to announce achievement of this goal well ahead of schedule based on a number of initiatives. At its Washington Gas LEED Gold-certified facility in Springfield, Virginia, for example, approximately 35 percent of the building's base load power comes from an on-site solid oxide fuel cell that generates electricity through a process with far less emissions than grid-generated electricity. The Washington Gas fleet reduced its carbon footprint by 25 percent, primarily by deploying nearly 200 clean-burning natural gas vehicles. In addition, the company acquires Renewable Energy Credits (RECs) to match all purchased electricity for each of its facilities.

The EPA Methane Challenge provides a mechanism for natural gas and other energy companies to make and track commitments established in collaboration with the EPA to lower methane emissions that improve air quality. It is a voluntary program designed for participants that submit meaningful and ambitious methane reduction goals and are prepared to transparently account for progress and demonstrate ongoing improvements.

The Methane Challenge Program and its founding partners will be introduced today at the Global Methane Forum at an event hosted by Janet McCabe, EPA's acting assistant administrator for Air and Radiation, at the Georgetown University Hotel and Conference Center in Washington, DC.

### **About Washington Gas**



Follow us @wglanswers on Twitter or WGL on LinkedIn

washingtongas.com  
m

ED\_000761\_0002243

Washington Gas Light Company is a regulated natural gas utility providing safe, reliable natural gas service to more than 1.1 million customers in the District of Columbia, Maryland and Virginia. A subsidiary of WGL Holdings, Inc., the company has been providing energy to residential, commercial and industrial customers for more than 167 years.

## **About WGL**

WGL (NYSE: WGL), headquartered in Washington, D.C., is a leading source for clean, efficient and diverse energy solutions. With activities and assets across the U.S., WGL consists of Washington Gas, WGL Energy, WGL Midstream and Hampshire Gas. WGL provides options for natural gas, electricity, green power and energy services, including generation, storage, transportation, distribution, supply and efficiency. Our calling as a company is to make energy surprisingly easy for our employees, our community and all our customers. Whether you are a homeowner or renter, small business or multinational corporation, state and local or federal agency, WGL is here to provide Energy Answers. Ask Us. For more information, visit us at [www.wgl.com](http://www.wgl.com).

# # #



Follow us @wglanswers on Twitter or WGL on  
LinkedIn

washingtongas.co  
m

ED\_000761\_0002244

**To:** Rubin, Jake[JRubin@aga.org]  
**From:** DeLuca, Isabel  
**Sent:** Tue 3/29/2016 7:41:52 PM  
**Subject:** RE: Methane Challenge Launch Event

Hi Jake,

I'm very sorry about the delay in responding—thanks for sharing your press release. We just had one suggestion for clarification.

In our comms materials, we are sharing that we are launching the Methane Challenge Program with 41 founding partners. To avoid confusion, we thought it might be good if your release could specify what the 33 utilities refers to—maybe something like this would work? “33 AGA-member natural gas utilities today joined the launch of the U.S. Environmental Protection Agency’s Natural Gas STAR Methane Challenge Program whereby oil and gas companies can make and track commitments to reduce emissions and showcase their efforts to improve air quality and capture and monetize this valuable energy resource.”

Also, I'm checking on the status of our press release. The latest I've heard is that EPA is planning on issuing a press advisory tomorrow at 8 or 8:30 am it tomorrow at 11 am.

Thanks,  
Isabel

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Rubin, Jake [mailto:JRubin@aga.org]  
**Sent:** Monday, March 28, 2016 2:25 PM

**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** RE: Methane Challenge Launch Event

Hey Isabel,

Our draft press release is attached. I believe a number of our members are planning to issue their own releases as well.

Thanks,

Jake

**Jake Rubin | Director, Public Relations**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7027 | M: 202-841-2940 | F: 202-824-9106 | [jrubin@aga.org](mailto:jrubin@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to nearly 69 million customers throughout the nation.

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Wednesday, March 23, 2016 11:35 AM  
**To:** Rubin, Jake <[JRubin@aga.org](mailto:JRubin@aga.org)>; Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>  
**Subject:** RE: Methane Challenge Launch Event

Hi Jake,

Apologies for the delay in responding. We have tentatively scheduled to issue a press advisory for 8:30 am on 3/30, though that's still in review.

Our press release is a work in progress, but I can send you a list of key messages if that would be



helpful. These are being vetted internally and I hope to have a final set soon. If you are concerned about consistent messaging, we'd be happy to review your press release, if you wish.

Thanks for reaching out, and I'm happy to chat if that would be helpful.

Best,

Isabel

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Rubin, Jake [<mailto:JRubin@aga.org>]  
**Sent:** Tuesday, March 22, 2016 1:48 PM  
**To:** Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>  
**Cc:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Methane Challenge Launch Event

Thanks. Could you share with me a draft of the press release? We would like to send out our own release as well, certainly one that is complementary. I'd like to see how you are describing the event and the program so that we can echo that.

Are you inviting media to the event? We would be happy to issue a media advisory and invite media as well. We will also likely do some social media surround this.

If a meeting is helpful, then I am happy to come by. Let me know what works best for you.

Thanks,

Jake

**Jake Rubin | Director, Public Relations**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7027 | M: 202-841-2940 | F: 202-824-9106 | [jrubin@aga.org](mailto:jrubin@aga.org)

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**Sent:** Tuesday, March 22, 2016 1:24 PM

**To:** Rubin, Jake <[JRubin@aga.org](mailto:JRubin@aga.org)>

**Cc:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>

**Subject:** RE: Methane Challenge Launch Event

Hi Jake,

Here's what we're thinking in terms of media outreach on our end:

We plan to issue a press release at 11AM after the Launch Event, we may have some social media and a blog, as well, and we will be recognizing all our founding partners on the Methane Challenge website.

If you want to chat further we can set up a meeting with our comms people, and Isabel Deluca (cc'd) may be able to assist with that.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Rubin, Jake [<mailto:JRubin@aga.org>]  
**Sent:** Tuesday, March 22, 2016 12:54 PM  
**To:** Pryor, Justin <[Pryor.Justin@epa.gov](mailto:Pryor.Justin@epa.gov)>  
**Subject:** RE: Methane Challenge Launch Event

Hey Justin,

Who should I talk to about media outreach?

Thanks,

Jake

**Jake Rubin | Director, Public Relations**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7027 | M: 202-841-2940 | F: 202-824-9106 | [jrubin@aga.org](mailto:jrubin@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to nearly 69 million customers throughout the nation.

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]

**Sent:** Tuesday, March 22, 2016 12:24 PM

**To:** Lacey, Pam <[PLacey@aga.org](mailto:PLacey@aga.org)>

**Cc:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>; Rubin, Jake <[JRubin@aga.org](mailto:JRubin@aga.org)>; Traweck, Lori <[LTraweck@aga.org](mailto:LTraweck@aga.org)>

**Subject:** RE: Methane Challenge Launch Event

Hi Pam,

Hope the below helps, but again, let me know if there is anything further info you or the speakers might need.

With regard to the first three bulleted questions, I'll refer to the draft Event Agenda:

**10:00 AM -10:05 AM      Welcome remarks (Janet McCabe)**

**10:05 AM -10:15 AM      Brief Remarks from Supportive Industry Associations**

American Gas Association (AGA)

Downstream Initiative (DSI)

**10:15 AM - 10:35 AM      Introduce Program Partners**

**10:35 AM – 10:40 AM      Closing remarks**

**10:40 AM - 10:45 AM     Group Photo**

The length of the event will be 45 minutes, and structured as indicated above. Ms. McCabe will provide the opening remarks, which will last at most 5 minutes. Due to the time constraints, AGA and Downstream Initiative will both have 5 minutes each to speak.

We are planning for the company reps to provide us with a short (75 word) bio describing their company, their commitment(s), and reasons for becoming program partners, and each one of those will be read during the “Introduce Program Partners” time slot. We are planning to have company representatives come on stage for individual photos as their bios are read. We are mindful of timing for this, and hence are keeping the bios very short, but also need to balance the fact that individuals will be traveling for this and we want to give them appropriate recognition for participating.

Finally, all individuals that plan to attend the launch event should register for the GMF. Registration is free and there is no requirement to attend any other conference events. We will have specific logistical information for participants available when they pick up their nametags at registration.

Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**From:** Lacey, Pam [mailto:PLacey@aga.org]  
**Sent:** Friday, March 18, 2016 5:11 PM  
**To:** Pryor, Justin <Pryor.Justin@epa.gov>  
**Cc:** Bylin, Carey <Bylin.Carey@epa.gov>; Rubin, Jake <JRubin@aga.org>; Traweek, Lori <LTraweek@aga.org>  
**Subject:** RE: Methane Challenge Launch Event

Justin – Yes, Ralph LaRossa is definitely planning to attend and to give some remarks. We actually had interest from a second CEO, our Board First Vice Chair and CEO of ONE Gas Pierce Norton. But if we only have 5 minutes for AGA remarks, I think I should probably find out if he still wants to come to DC. I have copied Jake Rubin our communications director – as Jake will likely draft the remarks. He can figure out which portion would be for Mr. LaRossa and which for Ms. Traweek.

●□□□□□□□□ Could you give me a rough idea of how the event is likely to be structured? About how long will it be in total? An hour?

●□□□□□□□□ Do you plan to have other industry *speakers*?

●□□□□□□□□ How long do you plan for Air Administrator Janet McCabe to speak (and/or Administrator McCarthy if she drops in)?

●□□□□□□□□ Do you plan to have company reps troop across the stage to collect their certificates like a graduation? (hope not – that would be deadly dull) I think reading the names and having them printed – along with a group photo for each group would keep it crisp while providing acknowledgement. (e.g. AGA & member distribution companies in one photo, INGAA pipelines, ONE Future if they are ready...) We could arrange for individual company photos after the main launch event.

- Just to confirm – Founding Partners etc. can come to just the launch event without having to register for the whole Global Methane conference, correct?

- Thoughts? Thanks! - Pam

**Pamela A. Lacey | Chief Regulatory Counsel**

**Office of General Counsel**

American Gas Association

400 N. Capitol St., NW | Washington, DC | 20001

P: 202-824-7340 | M: 202-809-6565 | F: 202-824-9190 | [placey@aga.org](mailto:placey@aga.org)

The American Gas Association represents more than 200 local energy companies committed to the safe and reliable delivery of clean natural gas to over 69 million customers throughout the nation.

**From:** Pryor, Justin [<mailto:Pryor.Justin@epa.gov>]  
**Sent:** Friday, March 18, 2016 4:27 PM  
**To:** Lacey, Pam <[PLacey@aga.org](mailto:PLacey@aga.org)>  
**Cc:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** Methane Challenge Launch Event

Hi Pam,

So March 30<sup>th</sup> is coming quick, and we are trying to tie up all of our launch event bows.

AGA is one of those bows! As previously discussed, we welcome some brief remarks from AGA

during the event. Due to time constraints, we are looking to limit these remarks to a maximum of 5 minutes. As far as content goes, we would appreciate it if AGA could share the planned remarks with us prior to the event for our awareness (if possible, by March 23). Can you confirm that Ralph LaRossa and Lori Traweek are still planned to speak (or if the time constraint may make it difficult for both to speak)?

Our agenda at this point is as follows (it has been evolving, but if further changes are made that may affect AGA, we will be sure to share with you):

**Agenda:**

**10:00 AM -10:05 AM      Welcome remarks**

**10:05 AM -10:15 AM      Brief Remarks from Supportive Industry Associations**

**American Gas Association (AGA)**

**Downstream Initiative (DSI)**

**10:15 AM - 10:35 AM      Introduce Program Partners**

**10:35 AM – 10:40 AM      Closing remarks**

**10:40 AM - 10:45 AM      Group Photo**

Please do not distribute this draft agenda, as we intend to send a final, detailed version to all companies attending. Please let me know if you have any questions, and have a great weekend!



Respectfully,

Justin

Justin Pryor

Climate Change Division

U.S. Environmental Protection Agency

202-343-9258

**To:** Subbotin, Melissa[MVSN@pge.com]  
**From:** DeLuca, Isabel  
**Sent:** Tue 3/29/2016 1:55:25 PM  
**Subject:** RE: Draft Quote

Hi Melissa—

Do you think we could see a copy of the press release? Our press office prefers to see the context where a quote will be used before they sign off on the quote.

Thanks,  
Isabel

**Isabel DeLuca**

Climate Change Division, US EPA

(202) 343-9247

**From:** DeLuca, Isabel  
**Sent:** Monday, March 28, 2016 5:34 PM  
**To:** 'Subbotin, Melissa' <MVSN@pge.com>  
**Subject:** RE: Draft Quote

Great. Sorry not to be more specific about our release time—we'll be issuing it at 11 am EDT on 3/30.

**From:** Subbotin, Melissa [<mailto:MVSN@pge.com>]

**Sent:** Monday, March 28, 2016 5:31 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Draft Quote

Of course and thank you for sharing. We are not releasing ours until 9PDT/12EDT on Wednesday at the earliest.

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Monday, March 28, 2016 2:29 PM  
**To:** Subbotin, Melissa  
**Subject:** RE: Draft Quote

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.  
\*\*\*\*\*

Yes, the total number of founding partners is 41. We'd like to keep that embargoed until our press release is issued at 11 am.

Thanks!

**From:** Subbotin, Melissa [<mailto:MVSN@pge.com>]  
**Sent:** Monday, March 28, 2016 5:24 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** FW: Draft Quote

Hi Isabel,

I'm filling in for Stephanie while she's out over the next couple of days. While we await approval of a quote for our release, can you tell me how many other partners there are in the new Methane Challenge?

Thanks,

Melissa Subbotin

**From:** Dell, Stephanie  
**Sent:** Monday, March 28, 2016 2:07 PM  
**To:** Subbotin, Melissa; Stimmel, Nick  
**Subject:** Fwd: Draft Quote

FYI

Sent from my iPhone

Begin forwarded message:

**From:** "DeLuca, Isabel" <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Date:** March 28, 2016 at 2:05:55 PM PDT  
**To:** "Dell, Stephanie" <[S3DD@pge.com](mailto:S3DD@pge.com)>  
**Subject: RE: Draft Quote**

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\*\*\*\*\*

Hi Stephanie,

Apologies for the delay. I'm still running this quote up our management chain with the hopes of finalizing a quote from a high-level official here. I am aiming to have a response for you tomorrow.

Thanks for your patience,  
Isabel

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]  
**Sent:** Friday, March 25, 2016 5:50 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Draft Quote

Hi Isabel,

This version of the quote is slightly modified. Please use this one.

“The Natural Gas Methane Challenge is an integral part of the EPA’s and the Administration’s ongoing commitment to address methane emissions and global climate change. We are pleased that PG&E is stepping up to join this effort as a founding partner; it demonstrates their commitment to conservation and genuine concern for the environment,” said NAME, TITLE, EPA.

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Friday, March 25, 2016 2:19 PM  
**To:** Dell, Stephanie  
**Subject:** RE: Draft Quote

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\*\*\*\*\*

I think we won't have the final # until Monday—more on that soon.

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]  
**Sent:** Friday, March 25, 2016 5:14 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Draft Quote

Sounds great.

Quick question for you, do you know how many other foudnign members there will be?  
We'd like to mention that PG&E is one of xx, other companies to sign on.

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Thanks, Stephanie, we'll take a look and I'll get back to you Monday, if that's ok.

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [mailto:S3DD@pge.com]  
**Sent:** Friday, March 25, 2016 5:00 PM  
**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** Draft Quote

Hi Isabel,

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Please let me know if we're approved to use it or if you'd like to make any changes. I look forward to hearing back from you.

"The Methane Challenge Program is an integral part of the EPA's and the Administrations ongoing commitment to address methane emissions and global climate change. We are pleased that PG&E is stepping up to join this effort as a founding partner, it demonstrates their commitment to conservation and genuine concern for the environment," said NAME, TITLE, EPA.

Thanks,

Stephanie

Stephanie Dell | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

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**Isabel DeLuca**

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Climate Change Division, US EPA

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Director of Communications

Climate Change Division, US EPA

(202) 343-9247

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Thanks,

Stephanie

**Stephanie Dell** | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

**To:** Subbotin, Melissa[MVSN@pge.com]  
**From:** DeLuca, Isabel  
**Sent:** Mon 3/28/2016 9:28:34 PM  
**Subject:** RE: Draft Quote

Yes, the total number of founding partners is 41. We'd like to keep that embargoed until our press release is issued at 11 am.

Thanks!

**From:** Subbotin, Melissa [mailto:MVSN@pge.com]  
**Sent:** Monday, March 28, 2016 5:24 PM  
**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** FW: Draft Quote

Hi Isabel,

I'm filling in for Stephanie while she's out over the next couple of days. While we await approval of a quote for our release, can you tell me how many other partners there are in the new Methane Challenge?

Thanks,

Melissa Subbotin

**From:** Dell, Stephanie  
**Sent:** Monday, March 28, 2016 2:07 PM  
**To:** Subbotin, Melissa; Stimmel, Nick  
**Subject:** Fwd: Draft Quote

FYI

Sent from my iPhone

Begin forwarded message:

**From:** "DeLuca, Isabel" <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>

**Date:** March 28, 2016 at 2:05:55 PM PDT

**To:** "Dell, Stephanie" <[S3DD@pge.com](mailto:S3DD@pge.com)>

**Subject: RE: Draft Quote**

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

\*\*\*\*\*

Hi Stephanie,

Apologies for the delay. I'm still running this quote up our management chain with the hopes of finalizing a quote from a high-level official here. I am aiming to have a response for you tomorrow.

Thanks for your patience,  
Isabel

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]

**Sent:** Friday, March 25, 2016 5:50 PM

**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>

**Subject:** RE: Draft Quote

Hi Isabel,

This version of the quote is slightly modified. Please use this one.

“The Natural Gas Methane Challenge is an integral part of the EPA’s and the Administration’s ongoing commitment to address methane emissions and global climate change. We are pleased that PG&E is stepping up to join this effort as a founding partner; it demonstrates their commitment to conservation and genuine concern for the environment,” said NAME, TITLE, EPA.

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Friday, March 25, 2016 2:19 PM  
**To:** Dell, Stephanie  
**Subject:** RE: Draft Quote

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\*\*\*\*\*

I think we won’t have the final # until Monday—more on that soon.

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]  
**Sent:** Friday, March 25, 2016 5:14 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Draft Quote

Sounds great.

Quick question for you, do you know how many other foudnign members there will be? We’d like to mention that PG&E is one of xx, other companies to sign on.



**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Friday, March 25, 2016 2:14 PM  
**To:** Dell, Stephanie  
**Subject:** RE: Draft Quote

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\*\*\*\*\*

Thanks, Stephanie, we'll take a look and I'll get back to you Monday, if that's ok.

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]  
**Sent:** Friday, March 25, 2016 5:00 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** Draft Quote

Hi Isabel,

In follow up to our conversation, below is a draft quote for our new release regarding PG&E's commitment to the methane challenge. Our release is still being routed for approvals internally, but I wanted to get the draft quote to you ASAP.

Please let me know if we're approved to use it or if you'd like to make any changes. I look forward to hearing back from you.

"The Methane Challenge Program is an integral part of the EPA's and the Administrations ongoing commitment to address methane emissions and global climate change. We are pleased that PG&E is stepping up to join this effort as a founding partner, it demonstrates their commitment to conservation and genuine concern for the environment," said NAME, TITLE, EPA.

Thanks,

Stephanie

**Stephanie Dell** | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

**To:** Dell, Stephanie[S3DD@pge.com]  
**From:** DeLuca, Isabel  
**Sent:** Mon 3/28/2016 9:26:39 PM  
**Subject:** RE: Draft Quote

Hi Stephanie,

Apologies once again. My comms office tells me they can't finalize the quote without the context of the full press release. Can you send me a draft when you have it ready?

Thanks,

Isabel

**From:** DeLuca, Isabel  
**Sent:** Monday, March 28, 2016 5:06 PM  
**To:** 'Dell, Stephanie' <S3DD@pge.com>  
**Subject:** RE: Draft Quote

Hi Stephanie,

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Isabel

**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]  
**Sent:** Friday, March 25, 2016 5:50 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Draft Quote

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**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Friday, March 25, 2016 2:19 PM  
**To:** Dell, Stephanie  
**Subject:** RE: Draft Quote

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\*\*\*\*\*

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**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]  
**Sent:** Friday, March 25, 2016 5:14 PM  
**To:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** RE: Draft Quote

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Quick question for you, do you know how many other foudnign members there will be? We'd like to mention that PG&E is one of xx, other companies to sign on.

**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Friday, March 25, 2016 2:14 PM  
**To:** Dell, Stephanie  
**Subject:** RE: Draft Quote

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Director of Communications

Climate Change Division, US EPA

(202) 343-9247

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Thanks,

Stephanie

Stephanie Dell | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

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**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [mailto:S3DD@pge.com]  
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**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** RE: Draft Quote

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**Sent:** Friday, March 25, 2016 2:19 PM  
**To:** Dell, Stephanie  
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**Subject:** RE: Draft Quote

Sounds great.

Quick question for you, do you know how many other foudnign members there will be? We’d like to mention that PG&E is one of xx, other companies to sign on.

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**To:** Dell, Stephanie  
**Subject:** RE: Draft Quote



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Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [<mailto:S3DD@pge.com>]

**Sent:** Friday, March 25, 2016 5:00 PM

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**Subject:** Draft Quote

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Thanks,

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**Stephanie Dell** | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

**To:** Dell, Stephanie[S3DD@pge.com]  
**From:** DeLuca, Isabel  
**Sent:** Fri 3/25/2016 9:19:28 PM  
**Subject:** RE: Draft Quote

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**From:** Dell, Stephanie [mailto:S3DD@pge.com]  
**Sent:** Friday, March 25, 2016 5:14 PM  
**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** RE: Draft Quote

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Climate Change Division, US EPA

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(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

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**From:** DeLuca, Isabel  
**Sent:** Fri 3/25/2016 9:13:32 PM  
**Subject:** RE: Draft Quote

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**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Dell, Stephanie [mailto:S3DD@pge.com]  
**Sent:** Friday, March 25, 2016 5:00 PM  
**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Subject:** Draft Quote

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Thanks,

Stephanie

**Stephanie Dell** | Corporate Relations – Gas Communications  
Pacific Gas and Electric Company  
(925) 328-6190 office | (b)(6) personal privacy cell  
[stephanie.dell@pge.com](mailto:stephanie.dell@pge.com)

**To:** Brian Jones[bjones@mjbradley.com]  
**Cc:** Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** DeLuca, Isabel  
**Sent:** Wed 3/23/2016 3:56:03 PM  
**Subject:** RE: Launch Event

Sounds good—thanks.1

**From:** Brian Jones [mailto:bjones@mjbradley.com]  
**Sent:** Wednesday, March 23, 2016 11:50 AM  
**To:** DeLuca, Isabel <DeLuca.Isabel@epa.gov>  
**Cc:** Bylin, Carey <Bylin.Carey@epa.gov>  
**Subject:** RE: Launch Event

Hi Isabel,

I can call you at 3:30 this afternoon if that works for you?

Thank you very much.

Brian

---

Brian M. Jones

Senior Vice President

M.J. Bradley & Associates, LLC

47 Junction Square Drive

Concord, MA 01742

Main: 978-369-5533 | Direct: 978-405-1269

[www.mjbradley.com](http://www.mjbradley.com)



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**From:** DeLuca, Isabel [<mailto:DeLuca.Isabel@epa.gov>]  
**Sent:** Wednesday, March 23, 2016 11:17 AM  
**To:** Brian Jones <[bjones@mjbroadley.com](mailto:bjones@mjbroadley.com)>; Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
**Subject:** RE: Launch Event

Hi Brian,

Apologies for the delay in responding! Here's a short run-down of what we're planning comms-wise around the Methane Challenge launch:

- Press advisory announcing Methane Challenge Launch and other events (still tentative, would be issued 8:30 am on 3/30)
- Press release (after launch event, scheduled for 11:30 am)
- Updates to website announcing founding partners
- Social media (in tandem with press release—follow-on messages TBD)

I'm happy to chat with you, if it would be helpful. I'm available between 2:30 and 4:30.

Best,



**Isabel DeLuca**

Director of Communications

Climate Change Division, US EPA

(202) 343-9247

**From:** Brian Jones [<mailto:bjones@mjbroadley.com>]

**Sent:** Wednesday, March 23, 2016 9:08 AM

**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>

**Cc:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>

**Subject:** RE: Launch Event

Hi Carey, Thank you.

Hi Isabel,

Please let me know if you have time to touch base on the press strategy for the methane challenge launch event – I am open this morning (other than 11 am eastern) and this afternoon. I am developing an press strategy for the Downstream Natural Gas Initiative and several individual member companies are interested in coordinating with EPA.

Thanks

Brian

---

Brian M. Jones

Senior Vice President

M.J. Bradley & Associates, LLC

47 Junction Square Drive

Concord, MA 01742

Main: 978-369-5533 | Direct: 978-405-1269

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**From:** Bylin, Carey [<mailto:Bylin.Carey@epa.gov>]  
**Sent:** Wednesday, March 23, 2016 9:04 AM  
**To:** Brian Jones <[bjones@mjbradley.com](mailto:bjones@mjbradley.com)>  
**Cc:** DeLuca, Isabel <[DeLuca.Isabel@epa.gov](mailto:DeLuca.Isabel@epa.gov)>  
**Subject:** Re: Launch Event

Hi Brian, Isabel Deluca, copied, is our press contact.

Carey Bylin

On Mar 23, 2016, at 8:47 AM, Brian Jones <[bjones@mjbradley.com](mailto:bjones@mjbradley.com)> wrote:

Thanks Carey. Who is the EPA press contact for the event?

Brian Jones

508-496-7807

On Mar 22, 2016, at 9:24 PM, Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)> wrote:

Okay, great, thank you for confirming. I'm not sure if you need a formal invite that you can forward, I've attached one below. Please let me know if you need more information, and thank you very much for your help with this.

\*\*\*\*\*

Dear Brian,

On behalf of the US EPA, I would like to invite a representative of the Downstream Initiative to make opening remarks during our Methane Challenge launch ceremony on March 30, 2016 at the Global Methane Forum in Washington, DC. The launch event will be hosted by Janet McCabe, EPA's Acting Assistant Administrator for Air and Radiation, and will follow a plenary session "Different Approaches to Methane Policies", allowing EPA to highlight Methane Challenge as a significant new action to address US oil and gas methane emissions. The GMF agenda is available at the following link:

[http://www.globalmethane.org/forum/docs/Draft\\_CombinedAgenda.pdf#page=5](http://www.globalmethane.org/forum/docs/Draft_CombinedAgenda.pdf#page=5).

We have appreciated the productive and collaborative engagement of Downstream Initiative and its partner companies as this Program was developed, and would value your participation at this event. The event agenda is provided below. Due to our strong founding partner turnout and time limitations of the event, we ask that you limit your remarks to five minutes.

## Methane Challenge Program Launch Event

**When:**                    **Wednesday, March 30, 2016, 10:00-10:45AM**

**Global Methane Forum Plenary Session, immediately following Policy Roundtable: Different Approaches to Methane Policies 08:30-10:00AM**

*\*Reserved seating at the front of the room for Methane Challenge launch participants*

**Where:**            **Georgetown University Hotel and Conference Center,  
Washington, DC**

**Agenda:**

**10:00 AM -10:05 AM     Welcome remarks**

*Janet McCabe, Acting Assistant Administrator for Air and Radiation, US EPA*

**10:05 AM -10:15 AM     Brief Remarks from Supportive Industry Associations**

*American Gas Association (AGA)*

*Downstream Initiative (invited)*

**10:15 AM - 10:35 AM     Introduce Program Partners**

*Introduce each partner in alphabetical order.*

*Read brief partner statements (30 seconds pre partner) that summarizes the company's business and their planned commitment as a Methane Challenge partner. While the short company statement is being read, each partner representative walks on stage and shakes hands with Janet McCabe [pause for individual photo]*

**10:35 AM – 10:40 AM     Closing remarks**

**10:40 AM - 10:45 AM     Group Photo**

*Group photo (all companies) with Janet McCabe on the stage*

Additionally, from 12:30 - 1:30 pm, there will be an informal opportunity for you to discuss the Methane Challenge with EPA representatives. The location will be announced at the Launch Event.

If you haven't yet registered for the Global Methane Forum, please do so as soon as possible at <http://globalmethane.org/forum/>. On the day of the event, staff will be available at the registration desk to answer questions and provide assistance.

Please feel free to contact me (202-343-9669 or [bylin.carey@epa.gov](mailto:bylin.carey@epa.gov)) with any questions. We hope you will be able to join us at this important event.

Best regards,

Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

Global Methane Initiative

U.S. Environmental Protection Agency

---

Ms. Carey Bylin

International Programs Leader, Oil and Gas

Natural Gas STAR Program

Global Methane Initiative

U.S. Environmental Protection Agency

Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)

1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460

<image001.gif>

**From:** Brian Jones [<mailto:bjones@mjb Bradley.com>]

**Sent:** Tuesday, March 22, 2016 4:23 PM

**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>

**Subject:** Launch Event

Hi Carey

Speaking on behalf of DSI will likely be Robert LaCount, Executive Vice President, MJB&A. Can you send along an "invite" to Downstream Initiative to participate and the draft agenda for the event?

Thanks

Brian

---

Brian M. Jones

Senior Vice President

M.J. Bradley & Associates, LLC

47 Junction Square Drive

Concord, MA 01742

Main: 978-369-5533 | Direct: 978-405-1269

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**To:** Bylin, Carey[Bylin.Carey@epa.gov]  
**Cc:** Franklin, Pamela[Franklin.Pamela@epa.gov];  
Manfredi.Caltagirone@unep.org[Manfredi.Caltagirone@unep.org];  
Philip.Swanson.Affiliate@unep.org[Philip.Swanson.Affiliate@unep.org]  
**From:** Mark.Radka@unep.org  
**Sent:** Tue 2/23/2016 4:23:34 PM  
**Subject:** Re: Quick discussion about the CCAC Oil and Gas Methane Partnership

Dear Carey,

Thank you for taking time to speak to me last Friday. Your explanations about the Methane Challenge program and One Future commitment option were very helpful, and allowed me to better understand the larger environment in which the CCAC Oil and Gas Methane Partnership is operating.

Thanks again for taking the call, especially so at home.

Best regards,

Mark

**Mark Radka      Energy, Climate, and Technology Branch**  
**Chief      Division of Technology, Industry and Economics**  
**Telephone: +33 1 44 37 14 27      United Nations Environment Programme**  
[mark.radka@unep.org](mailto:mark.radka@unep.org)      1 rue Miollis, building VII  
75015 • Paris • France  
Telefax: +33 1 44 37 14 74

**We have moved! Please note our new address.**

**From:** "Bylin, Carey" <Bylin.Carey@epa.gov>  
**To:** "Mark.Radka@unep.org" <Mark.Radka@unep.org>,  
**Cc:** "Franklin, Pamela" <Franklin.Pamela@epa.gov>, "Manfredi.Caltagirone@unep.org" <Manfredi.Caltagirone@unep.org>,  
"Philip.Swanson.Affiliate@unep.org" <Philip.Swanson.Affiliate@unep.org>  
**Date:** 02/19/2016 03:13 PM  
**Subject:** Re: Quick discussion about the CCAC Oil and Gas Methane Partnership

---

Hi Mark,

Okay, great. I would appreciate if you could call me at Ex. 6 - Personal Privacy Pamela will not be able to join but wanted us to proceed.

Carey Bylin

On Feb 19, 2016, at 1:08 AM, "[Mark.Radka@unep.org](mailto:Mark.Radka@unep.org)" <[Mark.Radka@unep.org](mailto:Mark.Radka@unep.org)> wrote:



Dear Carey,

The latter of the two slots would work well for me. Please send me a number where I can reach you, or if it's easier feel free to phone me at +33 1 44 37 14 27.

Best regards, and my thanks to you and Pam for making time in your schedules.

Mark

**Mark Radka      Energy, Climate, and Technology Branch**  
**Chief      Division of Technology, Industry and Economics**  
Telephone: +33 1 44 37 14 27      **United Nations Environment Programme**  
[mark.radka@unep.org](mailto:mark.radka@unep.org)      1 rue Miollis, building VII  
75015 • Paris • France  
Telefax: +33 1 44 37 14 74

**We have moved! Please note our new address.**

From: "Bylin, Carey" <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>  
To: "[Mark.Radka@unep.org](mailto:Mark.Radka@unep.org)" <[Mark.Radka@unep.org](mailto:Mark.Radka@unep.org)>, "Franklin, Pamela" <[Franklin.Pamela@epa.gov](mailto:Franklin.Pamela@epa.gov)>,  
Cc: "[Philip.Swanson.Affiliate@unep.org](mailto:Philip.Swanson.Affiliate@unep.org)" <[Philip.Swanson.Affiliate@unep.org](mailto:Philip.Swanson.Affiliate@unep.org)>, "[Manfredi.Caltagirone@unep.org](mailto:Manfredi.Caltagirone@unep.org)"  
<[Manfredi.Caltagirone@unep.org](mailto:Manfredi.Caltagirone@unep.org)>  
Date: 02/18/2016 04:34 PM  
Subject: RE: Quick discussion about the CCAC Oil and Gas Methane Partnership

---

Hi Mark,

Good to hear from you, thanks for reaching out. Sorry to come back to you so late but we do have some availability tomorrow if that still works for you for a short discussion. We are open at 10:30a or 11:30a DC time. Would either of those work for you?

---

Ms. Carey Bylin  
International Programs Leader, Oil and Gas  
Natural Gas STAR Program  
Global Methane Initiative  
U.S. Environmental Protection Agency  
Phone: +1-202-343-9669

Visiting Address & Private Deliveries (courier, FedEx etc.)  
1201 Constitution Ave NW, Room Number 4353 UU, Washington DC 20004

U.S. Mail Address:

Mail Code 6207M, 1200 Pennsylvania Ave NW, Washington DC 20460

<mime-attachment.gif>

**From:** [Mark.Radka@unep.org](mailto:Mark.Radka@unep.org) [mailto:[Mark.Radka@unep.org](mailto:Mark.Radka@unep.org)]

**Sent:** Tuesday, February 16, 2016 3:15 AM

**To:** Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>; Franklin, Pamela <[Franklin.Pamela@epa.gov](mailto:Franklin.Pamela@epa.gov)>

**Cc:** [Philip.Swanson.Affiliate@unep.org](mailto:Philip.Swanson.Affiliate@unep.org); [Manfredi.Caltagirone@unep.org](mailto:Manfredi.Caltagirone@unep.org)

**Subject:** Quick discussion about the CCAC Oil and Gas Methane Partnership

Dear Carey and Pam,

Would either of you have time in your schedule this week for a quick discussion about the methane work being conducted under the CCAC's Oil and Gas Methane Partnership? You know how much we rely on the foundations provided by U.S. methane programs, so a clearer sense of where these are heading and the possible links to the OGMP would be really helpful.

Best regards from a sunny but chilly Paris,

Mark

**Mark Radka**      **Energy, Climate, and Technology Branch**  
Chief      **Division of Technology, Industry and Economics**  
Telephone: +33 1 44 37 14 27      **United Nations Environment Programme**  
[mark.radka@unep.org](mailto:mark.radka@unep.org)      1 rue Miollis, building VII  
75015 • Paris • France  
Telefax: +33 1 44 37 14 74



We have moved! Please note our new address.

**To:** Brian Jones[bjones@mjb Bradley.com]  
**Cc:** Franklin, Pamela[Franklin.Pamela@epa.gov]; Bylin, Carey[Bylin.Carey@epa.gov]; Waltzer, Suzanne[Waltzer.Suzanne@epa.gov]; Hargrove, Anne[Hargrove.Anne@epa.gov]  
**From:** Gunning, Paul  
**Sent:** Thur 10/8/2015 3:51:22 PM  
**Subject:** RE: Downstream Initiative Meeting - October 22

Brain, great seeing you as well. That works great, looking forward to it.

Thanks

Paul

**From:** Brian Jones [mailto:bjones@mjb Bradley.com]  
**Sent:** Thursday, October 08, 2015 10:27 AM  
**To:** Gunning, Paul  
**Cc:** Franklin, Pamela; Bylin, Carey; Waltzer, Suzanne  
**Subject:** RE: Downstream Initiative Meeting - October 22

Hi Paul,

It was good seeing you at the methane conference in Houston.

How does the 1:30 – 3:00 timeslot work for your team for the DSI meeting on October 22?

Thanks

Brian

**From:** Brian Jones  
**Sent:** Wednesday, September 23, 2015 10:28 AM  
**To:** 'Gunning, Paul' <Gunning.Paul@epa.gov>  
**Cc:** Franklin, Pamela <Franklin.Pamela@epa.gov>; Bylin, Carey <Bylin.Carey@epa.gov>; Waltzer, Suzanne <Waltzer.Suzanne@epa.gov>  
**Subject:** RE: Downstream Initiative Meeting - October 22

Hi Paul,

Thank you very much. That sounds great.

I will put the EPA team on the draft agenda in the afternoon and be in touch as the meeting gets closer.

I look forward to seeing you down in Houston at the CH4 Connections conference.

Thanks again,

Brian

**From:** Gunning, Paul [<mailto:Gunning.Paul@epa.gov>]  
**Sent:** Wednesday, September 23, 2015 8:35 AM  
**To:** Brian Jones <[bjones@mjb Bradley.com](mailto:bjones@mjb Bradley.com)>  
**Cc:** Franklin, Pamela <[Franklin.Pamela@epa.gov](mailto:Franklin.Pamela@epa.gov)>; Bylin, Carey <[Bylin.Carey@epa.gov](mailto:Bylin.Carey@epa.gov)>;  
Waltzer, Suzanne <[Waltzer.Suzanne@epa.gov](mailto:Waltzer.Suzanne@epa.gov)>  
**Subject:** Re: Downstream Initiative Meeting - October 22

Brian -

After checking in with folks it looks like the 22nd would work well (afternoon will likely be better but we would be able to accommodate your schedule/agenda). I would be happy to attend and give an update on where we are with all of these topics. Carey and Pamela should be able to attend as well. I would say anywhere from 60-90 min to allow for presentation and discussion.

Hope this is helpful.

Paul

---

**From:** Brian Jones <[bjones@mjbroadley.com](mailto:bjones@mjbroadley.com)>  
**Sent:** Thursday, September 17, 2015 5:16 PM  
**To:** Gunning, Paul  
**Cc:** Franklin, Pamela; Bylin, Carey; Waltzer, Suzanne  
**Subject:** Downstream Initiative Meeting - October 22

Hi Paul,

I hope you are doing well.

The fall meeting of the Downstream Natural Gas Initiative is scheduled for October 22 in Washington DC. I am pulling together the agenda now and hope EPA will be able to join us.

Topics areas of interest to DSI include the following:

- Methane strategy update
- Methane Challenge Program
- National GHG Inventory

Please let me know any thoughts you may have on the topic areas, attendees and timing.

Thanks,

Brian

\*\*\*\*\*

Brian M. Jones

Senior Vice President, Strategy and Policy

M.J. Bradley & Associates, LLC.

47 Junction Square Drive

Concord, MA 01742

Direct: (978) 405-1269

Mobile: (b)(6) personal privacy

Fax: (978) 369-7712

Email: [bjones@mjb Bradley.com](mailto:bjones@mjb Bradley.com)

Web: [www.mjb Bradley.com](http://www.mjb Bradley.com)

\*\*\*\*\*

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**To:** Brian Jones[bjones@mjbradley.com]  
**Cc:** Franklin, Pamela[Franklin.Pamela@epa.gov]; Bylin, Carey[Bylin.Carey@epa.gov]; Waltzer, Suzanne[Waltzer.Suzanne@epa.gov]  
**From:** Gunning, Paul  
**Sent:** Wed 9/23/2015 12:35:19 PM  
**Subject:** Re: Downstream Initiative Meeting - October 22

Brian -

After checking in with folks it looks like the 22nd would work well (afternoon will likely be better but we would be able to accommodate your schedule/agenda). I would be happy to attend and give an update on where we are with all of these topics. Carey and Pamela should be able to attend as well. I would say anywhere from 60-90 min to allow for presentation and discussion.

Hope this is helpful.

Paul

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**From:** Brian Jones <bjones@mjbradley.com>  
**Sent:** Thursday, September 17, 2015 5:16 PM  
**To:** Gunning, Paul  
**Cc:** Franklin, Pamela; Bylin, Carey; Waltzer, Suzanne  
**Subject:** Downstream Initiative Meeting - October 22

Hi Paul,

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- Methane strategy update
- Methane Challenge Program

- [REDACTED] National GHG Inventory

Please let me know any thoughts you may have on the topic areas, attendees and timing.

Thanks,

Brian

\*\*\*\*\*

Brian M. Jones

Senior Vice President, Strategy and Policy

M.J. Bradley & Associates, LLC.

47 Junction Square Drive

Concord, MA 01742

Direct: (978) 405-1269

Mobile: (b)(6) personal privacy

Fax: (978) 369-7712

Email: [bjones@mjbradley.com](mailto:bjones@mjbradley.com)

Web: [www.mjbradley.com](http://www.mjbradley.com)

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**From:** sarah.riegner@smiths.com  
**Location:** EPA; 1201 Constitution Ave NW (Have the guard call Jerome upon arrival)  
**Importance:** Normal  
**Subject:** FSA Meeting with EPA - Methane Challenge & Life Cycle Calculator  
**Start Date/Time:** Thur 8/27/2015 2:00:00 PM  
**End Date/Time:** Thur 8/27/2015 3:00:00 PM

;

**From:** Franklin, Pamela

**Location:** MeetingPlace: Ex. 6 - Personal Privacy ID: Ex. 6 - Personal Privacy

**Importance:** Normal

**Subject:** Accepted: EPA-ONE Future Calls: Finalization of programmatic details related to ONE Future Methane Challenge Commitment Option

**Start Date/Time:** Mon 4/25/2016 6:30:00 PM

**End Date/Time:** Mon 4/25/2016 7:30:00 PM

**From:** Franklin, Pamela

**Location:** MeetingPlace: [Ex. 6 - Personal Privacy] ID: [Ex. 6 - Personal Privacy]

**Importance:** Normal

**Subject:** Accepted: EPA-ONE Future Calls: Finalization of programmatic details related to ONE Future Methane Challenge Commitment Option

**Start Date/Time:** Mon 4/18/2016 6:30:00 PM

**End Date/Time:** Mon 4/18/2016 7:30:00 PM

**To:** Phillip Assmus[passmus@4cleanair.org]  
**Cc:** Waltzer, Suzanne[Waltzer.Suzanne@epa.gov]; Rosenberg, Julie[Rosenberg.Julie@epa.gov]  
**From:** Franklin, Pamela  
**Sent:** Wed 4/6/2016 12:52:59 PM  
**Subject:** RE: Pamela - are you available to participate on a NACAA Global Warming Ctte call next Wed?

Dear Phil,

Suzie Waltzer on my team will be able to participate in this call, and you can touch base with her directly regarding timing.

Best regards,

Pamela

Pamela M. Franklin, PhD

Branch Chief, Non-CO2 Programs

Climate Change Division

US Environmental Protection Agency

(202) 343-9476

franklin.pamela@epa.gov

**From:** Phillip Assmus [mailto:passmus@4cleanair.org]  
**Sent:** Tuesday, April 05, 2016 3:11 PM

**To:** Franklin, Pamela <Franklin.Pamela@epa.gov>

**Subject:** Re: Pamela - are you available to participate on a NACAA Global Warming Ctte call next Wed?

Pamela,

I writing to follow-up with a bit more information on the NACAA call. The call time is actually 2:00 to 3:30 and I have some flexibility to shift the speaking order to accommodate your schedule. I'm looking for about a 15 minute presentation with extra time for questions afterward. Slides would be at your option.

Please let me know as soon as you can whether you or someone on your team can join us on the 13th.

Thanks!

Phil

**From:** Julie Rosenberg <[rosenberg.julie@epa.gov](mailto:rosenberg.julie@epa.gov)>

**Date:** Monday, April 4, 2016 at 3:49 PM

**To:** "Franklin, Pamela" <[Franklin.Pamela@epa.gov](mailto:Franklin.Pamela@epa.gov)>

**Cc:** Phil Assmus <[PAssmus@4cleanair.org](mailto:PAssmus@4cleanair.org)>

**Subject:** Pamela - are you available to participate on a NACAA Global Warming Ctte call next Wed?

Hi Pamela, our colleague, Phil Assmus at NACAA, is requesting a speaker for a slot on their monthly Global Warming Ctte call next Wed @ 2-3 (he can work with you on time during the call). Specifically, he's requested: "An overview of EPA's methane reduction efforts (e.g., the non-final NSPS, the future ESPS and assorted voluntary programs like Natural Gas STAR Methane Challenge)." Can you or someone from your group cover this? I've cced Phil so you can connect directly back with him. Thanks, Julie

**Cc:** Ferland, Henry[Ferland.Henry@epa.gov]; Shimamura, Monica[Shimamura.Monica@epa.gov]  
**To:** franck.portalupi@canada.ca[franck.portalupi@canada.ca];  
sonja.henneman@canada.ca[sonja.henneman@canada.ca]  
**From:** Franklin, Pamela  
**Sent:** Thur 3/31/2016 1:23:36 PM  
**Subject:** Fwd: METHANE: McCarthy praises voluntary cuts globally

Some press coverage of yesterday with quotes from Ms. Cerutti.

Thanks for all of your support!

Pamela M. Franklin  
Branch Chief, Non-CO2 Programs  
US Environmental Protection Agency

Sent from my iPhone

Begin forwarded message:

**From:** "Phillips, Anna" <Phillips.Anna@epa.gov>  
**Date:** March 31, 2016 at 8:26:48 AM EDT  
**To:** "Shimamura, Monica" <Shimamura.Monica@epa.gov>, "Ferland, Henry" <Ferland.Henry@epa.gov>, "Pflanz, Kristina" <Pflanz.Kristina@epa.gov>, "Franklin, Pamela" <Franklin.Pamela@epa.gov>, "Gunning, Paul" <Gunning.Paul@epa.gov>  
**Cc:** "Buckley, Katherine" <Buckley.Katherine@epa.gov>, "MacDonald, Ted" <MacDonald.Ted@epa.gov>, "Mercurio, Cristina" <Mercurio.Cristina@epa.gov>, "Hill-Macon, Cam" <Hill-Macon.Cam@epa.gov>  
**Subject:** METHANE: McCarthy praises voluntary cuts globally

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## **METHANE:**

### **McCarthy praises voluntary cuts globally**

Niina Heikkinen, E&E reporter

Published: Thursday, March 31, 2016

A voluntary international initiative developed to cut global methane emissions from animal waste to oil wells will continue its work under a renewed charter, U.S. EPA Administrator Gina McCarthy announced yesterday.

The Global Methane Initiative is a partnership of 43 countries and hundreds of nongovernmental organizations aimed at slashing methane emissions from agriculture, oil and gas, waste, wastewater, and coal mines. McCarthy, speaking at the Global Methane Forum, said she was "thrilled" that the GMI's charter was renewed for another five years.

"So much of our success to date has been possible because of the leadership and cooperation of

the international community. When it comes to global challenges like climate change, partnerships and collaborations that can bridge national interests and bring us together are really the core, essential, ingredient for success," McCarthy said.

"That's precisely the kind of global cooperation that the Global Methane Initiative has successfully been promoting for many years," she added.

Since its establishment 12 years ago, GMI has worked to improve partners' ability to cut, capture and use methane by sharing tools, technical knowledge and best practices. EPA has a leading role in the partnership, serving as the Initiative Steering Committee chair. Other U.S. government agencies like the State and Energy departments also work closely with the partnership.

Joe Goffman, associate assistant administrator and senior counsel for EPA's Office of Air and Radiation, described GMI as one of the world's most effective voluntary initiatives, cutting an estimated 350 million metric tons of CO<sub>2</sub> equivalent worldwide. The initiative has the potential to cut 1 billion metric tons of CO<sub>2</sub> equivalent by 2030, he said.

Making substantial methane cuts will go a long way toward helping to keep global temperatures from rising more than 2 degrees Celsius, said Christian Bach, executive secretary of the United Nations Economic Commission for Europe (UNECE).

"We know methane is responsible for almost a third of today's global warming, but methane is short-lived, so if we address these issues, we can see climate benefits quickly," he said.

### **Fossil fuels won't disappear**

Efforts to cut methane internationally should engage the coal and oil and gas sectors as part of the solution, because fossil fuels will remain an integral part of the world's energy system for decades to come, Bach added.

"Whether we like it or not, it is a fact," he said. "Fossil fuels in the global energy mix will likely fully decrease from 80 percent today to 40 percent by 2050. But we will continue to use significant amounts of oil and gas and coal over the next decades. And we must also not shy away from how we can tackle this challenge. We must make it a priority to mitigate the negative impact of fossil fuels on the environment and on climate change."

Over the next few years, the initiative will begin working more closely with two of its partners, the Climate and Clean Air Coalition (CCAC) and UNECE. Both are working to address methane emissions internationally.

"Forging strategic alliances with CCAC and UNECE will benefit everyone as it alleviates duplication of efforts, streamlines processes and allows creative collaboration," Goffman said.

The increased collaboration was also praised by Rita Cerutti, co-chair of the CCAC.

"The CCAC and GMI are really natural partners," she said. "Yesterday, I mentioned that the GMI and CCAC are really good friends, they already do things together. This meeting is sort of like their first date -- with a lot of chaperones."

GMI's re-charter announcement came on the heels of EPA's launch of its latest voluntary methane emissions reduction program for the oil and gas industry, the Natural Gas STAR Methane Challenge Program. In total, 41 companies signed on as founding members, and EPA expects more to join over time.

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**To:** Mr. Scott Foster[Scott.Foster@unece.org]  
**From:** Franklin, Pamela  
**Sent:** Thur 3/31/2016 1:22:14 PM  
**Subject:** Fwd: METHANE: McCarthy praises voluntary cuts globally

Some press coverage of yesterday's event quoting Mr. Bach.

Pamela M. Franklin  
Branch Chief, Non-CO2 Programs  
US Environmental Protection Agency

Sent from my iPhone

Begin forwarded message:

**From:** "Phillips, Anna" <Phillips.Anna@epa.gov>  
**Date:** March 31, 2016 at 8:26:48 AM EDT  
**To:** "Shimamura, Monica" <Shimamura.Monica@epa.gov>, "Ferland, Henry" <Ferland.Henry@epa.gov>, "Pflanz, Kristina" <Pflanz.Kristina@epa.gov>, "Franklin, Pamela" <Franklin.Pamela@epa.gov>, "Gunning, Paul" <Gunning.Paul@epa.gov>  
**Cc:** "Buckley, Katherine" <Buckley.Katherine@epa.gov>, "MacDonald, Ted" <MacDonald.Ted@epa.gov>, "Mercurio, Cristina" <Mercurio.Cristina@epa.gov>, "Hill-Macon, Cam" <Hill-Macon.Cam@epa.gov>  
**Subject:** METHANE: McCarthy praises voluntary cuts globally

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**METHANE:**

**McCarthy praises voluntary cuts globally**

Niina Heikkinen, E&E reporter

Published: Thursday, March 31, 2016

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**From:** Franklin, Pamela

**Importance:** Normal

**Subject:** Accepted: FW: Meeting at API on EPA Methane Challenge (Ex. 6 - Personal Privacy #)

**Start Date/Time:** Tue 8/11/2015 5:00:00 PM

**End Date/Time:** Tue 8/11/2015 6:30:00 PM

**To:** Theresa Pugh[tpugh@ingaa.org]  
**Cc:** Gunning, Paul[Gunning.Paul@epa.gov]; Bylin, Carey[Bylin.Carey@epa.gov]  
**From:** Franklin, Pamela  
**Sent:** Thur 7/23/2015 9:06:45 PM  
**Subject:** FW: EPA Releases Natural Gas STAR Methane Challenge Proposal  
[methane\\_challenge\\_proposal\\_072315.pdf](#)

Dear Theresa,

I'm forwarding the announcement that went out with links to the webpage. I'm sorry that it did not get to you. Attached is the proposal as well.

Best regards

Pamela

Pamela M. Franklin, PhD

Branch Chief, Non-CO2 Programs

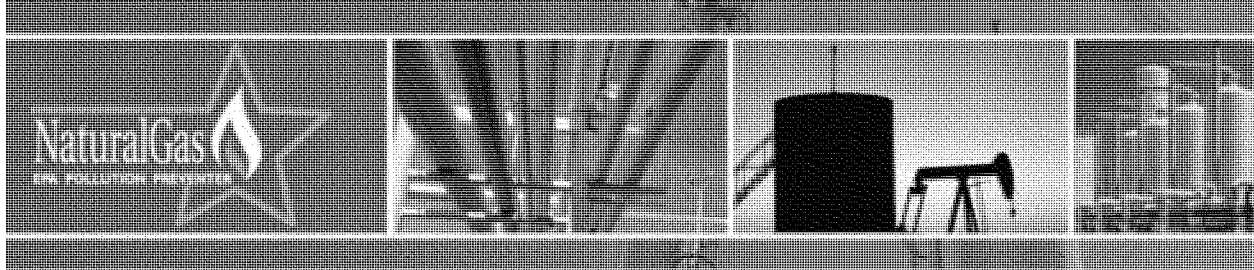
Climate Change Division

US Environmental Protection Agency

(202) 343-9476

[franklin.pamela@epa.gov](mailto:franklin.pamela@epa.gov)

**From:** EPA Natural Gas STAR Program [<mailto:gasstar@tetrattech.com>]  
**Sent:** Thursday, July 23, 2015 4:14 PM  
**To:** Bylin, Carey  
**Subject:** EPA Releases Natural Gas STAR Methane Challenge Proposal



EPA is proposing the voluntary [Natural Gas STAR Methane Challenge Program](#) (“Methane Challenge”) (PDF), which would provide a new mechanism through which oil and gas companies could make and track ambitious commitments to reduce methane emissions. The Program is based on extensive stakeholder outreach and is a significant revision of EPA’s previously proposed Gas STAR Gold framework.

While tremendous progress has been made during the last 20 years through the successful Natural Gas STAR Program, significant opportunities remain to reduce methane emissions, improve air quality, and capture and monetize this valuable energy resource. This new program has the capability to comprehensively and transparently reduce emissions and realize significant voluntary reductions in a quick, flexible, cost-effective way.

## Register to attend an upcoming webinar

EPA is hosting a series of webinars from July 28-30, 2015 to provide details about the proposed Methane Challenge Program. Each webinar will address specific oil and gas sectors. You can learn more and register to attend the webinars at [Methane Challenge Webinars](#).

## EPA seeks your feedback

EPA encourages stakeholders to closely review and provide feedback on any and all elements of the proposed Methane Challenge Program. EPA will carefully consider and evaluate all feedback received through September 1, 2015. EPA intends to launch the Methane Challenge Program later in 2015. To learn more about the Methane Challenge Program, see the [Natural Gas STAR Methane Challenge Program homepage](#).



[Learn more about Natural Gas STAR](#)



# **Natural Gas STAR Methane Challenge Program: Proposed Framework**



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## Addressing U.S. Oil and Gas Methane Emissions

EPA is proposing the voluntary Natural Gas STAR Methane Challenge Program (“Methane Challenge”), which would provide a new mechanism through which companies could make and track ambitious commitments to reduce methane emissions. The Program is based on extensive stakeholder outreach<sup>1</sup> and reflects a revision of EPA’s previously proposed framework for an enhanced voluntary partnership in the oil and gas sector. While tremendous progress has been made during the last 20 years through the Natural Gas STAR Program, significant opportunities remain to reduce methane emissions, improve air quality, and capture and monetize this valuable energy resource. The proposed Methane Challenge Program will create a platform for leading companies to go above and beyond existing voluntary action and make meaningful and transparent commitments to yield significant methane emissions reductions in a quick, flexible, cost-effective way.

This document represents the next step in EPA’s ongoing work with stakeholders to design and launch a new, ambitious voluntary program. EPA is interested in stakeholder feedback on all aspects of the Methane Challenge proposal as well as how best to align the Program with other Administration efforts to reduce emissions. Highlighted at the end of this document are several specific areas where feedback would be particularly appreciated.

The Methane Challenge Program is an integral part of the EPA’s – and the Administration’s -- ongoing commitment to address methane emissions and global climate change. In March 2014, the White House released the *Strategy to Reduce Methane Emissions* that included EPA efforts to reduce methane emissions in the oil and natural gas sector.<sup>2</sup>

In January 2015,<sup>3</sup> the Obama Administration further demonstrated its commitment by announcing a goal to cut methane emissions from this sector by 40-45 percent from 2012 levels by 2025. EPA and other federal agencies are pursuing a series of regulatory and voluntary steps to put us on a path toward the 2025 goal. The agency plans to build on its 2012 New Source Performance Standards for the oil and natural gas industry to achieve both methane reductions and additional reductions in VOCs. EPA also plans to extend VOC reduction requirements to existing oil and gas sources in areas that could particularly benefit from VOC reductions: ozone nonattainment areas and states in the Ozone Transport Region. The agency will do this by issuing Control Techniques Guidelines (CTGs) that provide an analysis of the available, cost-effective technologies for controlling VOC emissions from covered oil and gas sources.<sup>4</sup> Many controls to reduce VOCs also reduce methane as a co-benefit.<sup>5</sup>

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<sup>1</sup> In the first half of 2015, EPA met with industry associations, individual oil and gas companies, industry-led initiatives, NGOs, other federal agencies (including Department of Energy and Department of Transportation), EPA regions, and states to gain feedback and participation in the design of this new approach. The Downstream Initiative group of natural gas distribution companies has been particularly engaged and constructive in proposing possible structures for the program and providing extensive feedback on program options.

<sup>2</sup> “Climate Action Plan,” <https://www.whitehouse.gov/sites/default/files/image/president27climateactionplan.pdf>

<sup>3</sup> “Administration Takes Steps Forward on Climate Action Plan by Announcing Actions to Cut Methane Emissions,” <https://www.whitehouse.gov/the-press-office/2015/01/14/fact-sheet-administration-takes-steps-forward-climate-action-plan-anno-1>

<sup>4</sup> CTGs apply in ozone nonattainment areas that are classified as moderate and above, and throughout the states in the Ozone Transport Region.

<sup>5</sup> EPA has received feedback from industry stakeholders to consider structuring any future Control Technique Guidelines (CTGs) in such a way that would provide incentives for early voluntary action.



The Methane Challenge Program will complement these regulatory actions, providing incentives and opportunities for companies to undertake and document ambitious voluntary methane emission reductions, principally from existing methane emission sources. Voluntary efforts to reduce emissions in a comprehensive and transparent manner hold the potential to realize significant reductions in a quick, flexible, cost-effective way.

EPA recognizes the potential overlap for coverage of this program with forthcoming regulatory actions, including emission sources that could be covered under CTGs, and emissions sources on federal lands, which are being evaluated for potential regulations by the Bureau of Land Management. EPA appreciates that companies in some segments of the industry may face uncertainty until these actions are finalized. Nonetheless, EPA believes that there is interest from leading companies to make meaningful commitments and the proposed Methane Challenge Program provides a platform for these actions, particularly those not covered in the regulations.

### **Relationship to the Natural Gas STAR Program and Gas STAR Gold**

Since 1993, EPA's Natural Gas STAR Program has successfully collaborated with the oil and natural gas industry on implementation of cost-effective methane emission reduction technologies and practices. To join Natural Gas STAR, partner companies commit to evaluating their operations to identify opportunities to reduce methane emissions, and to implement and report on their progress. Gas STAR partners have identified and implemented over 50 specific cost-effective technologies and practices throughout the oil and natural gas value chain. Through 2013, Gas STAR partner companies have reported voluntary methane emission reductions of over one trillion cubic feet (over 400 MMTCO<sub>2</sub>e).

The Methane Challenge Program will expand on Natural Gas STAR by creating a structure through which companies can make specific, ambitious voluntary commitments and annually submit data and information through Subpart W of the Greenhouse Gas Reporting Program (with some supplemental voluntary reporting) to transparently track progress. This is a significant departure from Natural Gas STAR, in which partner companies make a general commitment, participate at a range of levels (e.g., company-wide to facility or regional level), and only report information on emission reduction actions. In this way, the Methane Challenge Program provides a platform for companies that truly want to excel and differentiate themselves. The two hallmarks of the proposed program - ambitious commitments and transparency – will facilitate information sharing about accomplishments and progress made. Thus, the program can serve as a catalyst for broad industry adoption of best practices to reduce emissions.

The Methane Challenge proposal also seeks to balance ambitious voluntary commitments with appropriate flexibility. In response to EPA's 2014 Gas STAR Gold proposal, which outlined a certification-type program where facilities could adopt a comprehensive set of emission-source protocols to achieve "Gold" certification, many companies emphasized the need for greater programmatic flexibility. The feedback received on the Gas STAR Gold proposal, which EPA is not moving forward with, has resulted in this new Methane Challenge approach to an expanded voluntary program. Rather than a facility focus that was the basis of the Gas STAR Gold approach, the Methane Challenge Program proposal emphasizes company-wide commitment options. The proposed Methane Challenge Program incorporates flexibility into several program elements, including implementation timeframes to inspire ambition in a structure that is achievable.

EPA plans to maintain the Natural Gas STAR Program and to continue activities such as annual reporting of emission reduction activities and technology transfer workshops. For current Natural Gas STAR



partners that join the Methane Challenge, EPA would work with them to determine how and/or if they will participate in each program, in order to allow appropriate recognition and avoid duplication of efforts in reporting to each program.

### Goals of the Methane Challenge Program

Through the Methane Challenge Program, EPA is proposing to recognize leading companies that make voluntary, transparent commitments to increased action to reduce methane emissions from their operations. The key objectives of the proposed Program would be to achieve the following:

- Encourage and support ambitious industry commitments to significantly reduce methane emissions
- Offer flexible mechanisms to achieve stated commitments
- Promote innovative approaches to emissions measurement, monitoring and reduction technologies and practices
- Provide accountability and transparency for making and achieving commitments through robust annual data reporting that utilizes EPA's Greenhouse Gas Reporting Program (GHGRP) to the maximum extent possible
- Recognize progress of companies that have been proactive in reducing methane emissions
- Recognize improved environmental performance through quantitative assessment of reductions in emissions.

### Methane Challenge Program Structure

The Methane Challenge Program would invite companies with operations throughout the natural gas value chain – onshore production, gathering and boosting, processing, transmission, storage, and distribution segments – and in onshore oil production to commit to action under the Challenge. EPA has three primary criteria for recognizing companies as partners under this Program; company commitments should (1) be ambitious and achieve meaningful methane reductions across company operations; (2) be transparent with the ability to track and account for progress, and (3) demonstrate continuous improvement over time. EPA is proposing that companies participating in the Methane Challenge would have the opportunity to choose from two options<sup>6</sup> to reduce methane emissions from their operations:

- Best Management Practice (BMP) Commitment
- One Future Emissions Intensity Commitment

By signing up to either or both of these commitments, companies would become recognized partners in the Methane Challenge Program. The BMP commitment option is intended to drive near-term, widespread implementation of methane mitigation activities from key methane emission sources throughout the industry. Formed in 2014, the One Future program is an existing industry-led partnership through which companies make ambitious commitments to achieve methane emission intensity targets based on program-defined sector-specific emission rates<sup>7</sup>. Both options represent expanded, transparent voluntary commitments by partner companies that will drive further voluntary action to reduce oil and gas methane emissions. By recognizing both of these commitment options

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<sup>6</sup> Companies could also opt to sign up for both commitment options.

<sup>7</sup> EPA is not a formal member of One Future, but is proposing to support this industry-led effort. EPA applauds the strong commitment to reduce methane and believes that providing this linkage to Methane Challenge will facilitate the achievement and tracking of any reductions associated with this effort.



under the Methane Challenge Program, EPA seeks to promote adoption of expanded voluntary methane emission commitments while offering flexibility to allow companies to select the path that best fits with their capabilities and corporate priorities in reducing emissions.

To become a partner, individual companies would enter into agreements with EPA (e.g. via a memorandum of understanding (MOU)) to document their respective commitments. The MOU would also cover specific interactions with EPA, including reporting of baseline and mitigation activities through the GHGRP and supplemental data collection mechanisms. EPA is proposing that, within six months of joining the Methane Challenge Program, all partner companies would also develop an Implementation Plan to detail key aspects of their planned participation, such as anticipated rate of progress, key milestones, and context for their implementation plans (e.g., referencing work to be done during the next planned shutdown of a facility).

As part of their commitment, partners would track their progress through a transparent public mechanism (e.g., data system and website). EPA is proposing to leverage the significant amount of data reported by facilities to the Petroleum and Natural Gas Systems source category (Subpart W) of the GHGRP, plus voluntarily supplied supplemental data (as needed), to serve as the basis for tracking specific company actions. On an annual basis, the Program will compile relevant data from partner companies and release it publicly in order to transparently reflect individual company progress in meeting commitments.

Table 1. Process for Company Engagement

Key Steps	BMP Commitment	One Future (OF) Commitment
<b>Join Program</b>	Sign MOU with EPA covering source commitments, timing and agreement to submit data to Methane Challenge program	Sign MOU with OF covering commitments and timing; sign MOU with EPA agreeing to submit data to Methane Challenge Program
<b>Announce Commitments</b>	Company and commitments listed on Methane Challenge website	Company listed on Methane Challenge website with link to commitments, as listed on OF website
<b>Submit Implementation Plan</b>	Submit to EPA, with key milestones, six (6) months after joining program	Submit to OF and EPA, with key milestones, six (6) months after joining program
<b>Establish Baseline</b>	Not applicable	2012 supplemental data provided to Methane Challenge reporting mechanism to establish baseline (per EPA-specified data collection methodologies)
<b>Annual Reporting</b>	Submit voluntary supplementary data via Methane Challenge reporting mechanism (covered sources only)	Submit voluntary supplementary data via Methane Challenge reporting mechanism
<b>Annual Progress Tracking</b>	Source-specific data (activity and emissions) rolled up at company level and provided on Methane Challenge website	Company listing on Methane Challenge website links to company emissions intensity progress on OF website
<b>Data Transparency<sup>8</sup></b>	GHGRP data and voluntary data made available publicly	GHGRP data and voluntary data made available publicly

<sup>8</sup> To help promote transparency and visibility of the Methane Challenge Program and its member commitments, EPA envisions publicly releasing data voluntarily submitted to the Methane Challenge Program. In addition, EPA



## Best Management Practice (BMP) Commitment Option

Under this option, companies would commit to company-wide implementation of best practices to reduce methane emissions from key sources by a future date, as determined by the partner company. EPA would provide sector-specific lists of key methane emission sources and corresponding best management practices (BMPs). Partner companies would address one or more of these sources, and would designate the timing for achieving company-wide implementation of related BMPs. Companies could set different timelines for each source, as appropriate to their historic progress and anticipated ability to meet commitments. However, to drive action to reduce emissions in the near term, EPA is proposing that timing for full completion of commitments should not exceed five (5) years from the commitment date, and that commitments should include interim milestones (e.g. on an annual basis) to ensure steady progress towards full completion by the commitment date. EPA encourages companies to complete commitments in a shorter timeframe when appropriate. Companies would annually report on mitigation actions implemented and the program would track emissions reductions achieved as a result of voluntary actions taken.

### *Scope*

EPA has identified key emission sources (see Appendix 1) based on their contribution to national emissions and stakeholder interest in addressing those sources through a voluntary program. For each source, EPA would identify one or more BMPs to achieve mitigation commitments (see Appendix 2). Offering multiple BMPs (mitigation options) for each source would provide flexibility for partner companies to select activities and technologies that are best for their operations. To encourage innovation, EPA would consider additional mitigation activities for potential inclusion in the BMP option as data becomes available or upon request for consideration from partner companies. EPA will also consider adding new sources in the future.

EPA is proposing recommendations on how to define the organizational structure or level at which companies would make their Methane Challenge commitments. Companies have provided feedback that the ability to undertake widespread implementation of BMPs can vary, and corporate-wide commitments may not always be feasible. EPA seeks to define company commitments that find the appropriate balance of covering a significant portion of operations, while also defining a scope that is appropriate for widespread implementation of best practices. EPA's proposed organizational levels for establishing Methane Challenge commitments are provided in Appendix 3.

EPA has also received feedback that there may be operational circumstances or other conditions that could limit comprehensive implementation of BMPs for a given source. EPA is seeking feedback on the possibility of allowing partners to request an exemption to full implementation for each source commitment. Such exemptions could be considered on the condition that the exempted sources (basically, those for which a mitigation option is not implemented) would not represent a significant portion of methane emissions from that source, and would be transparently documented in annual results to provide context for company achievements. EPA is requesting feedback on whether to include this potential exemption option and, if so, how to structure it.

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would publish data submitted to the GHGRP as part of reporting under 40 CFR Part 98 that has not been determined to be confidential business information per GHGRP rulemakings.



### *Benefits and Considerations*

The BMP option offers the opportunity for partner companies to demonstrate comprehensive action to address methane emissions from key emitting sources. This option provides flexibility for companies in several ways: (1) to focus their commitment on one or more sources; (2) to establish the implementation timeframe, including relevant milestones as well as the target year for company-wide implementation of best practices; and (3) to select from BMP options that are affiliated with each source.

Companies that have already made significant progress in implementing BMPs prior to joining the Methane Challenge program (for example, because of their participation in the Natural Gas STAR Program) would be able to demonstrate that progress through the annual reporting process, and through the selection of a shorter timeframe for achieving company-wide implementation of best practices. In such a scenario, while these companies would be recognized for their progress in implementing BMPs, the commitments may not result in significant additional reductions in methane emissions. EPA seeks feedback on specific program design options that encourage partners to make source-specific commitments that would recognize progress and yield significant additional emission reductions. For example, the Program could specify that partner companies initially choosing to focus on a single source would agree to add another source to their commitment within three years of joining the Program. EPA requests feedback on how to structure the BMP option such that companies would be incentivized to regularly update commitments to continuously improve performance over time.

### **One Future Emissions Intensity Commitment Option**

ONE Future is an existing industry program administered by ONE Future, Inc., which is a 501(c)(6) entity<sup>9</sup>. It is a coalition of companies from across the natural gas industry focused on identifying policy and technical solutions that yield continuous improvement in the management of methane emissions associated with the production, processing, transmission and distribution of natural gas. One Future companies make a commitment to achieve a specified average rate of emissions intensity across all facilities within a specific segment by 2025. Each company has the flexibility to determine the most cost-effective pathway to achieve that goal – and agrees to demonstrate progress according to specific reporting protocols<sup>10</sup>. One Future companies have encouraged EPA to incorporate their approach into the Methane Challenge Program and have expressed their support for ambitious commitments and transparent tracking mechanisms that are hallmarks of the proposed program.

Partner companies choosing to adopt One Future's emissions intensity targets are making commitments that are congruent with EPA's goals in terms of ambition and transparency of commitments. Therefore, EPA proposes to recognize these companies' efforts as partners in the Methane Challenge program. Companies opting for this commitment would join the One Future partnership and, in doing so, agree to provide relevant supplemental data to EPA to demonstrate their methane emission reduction actions. EPA would recognize ONE Future participants' commitments and provide a reporting platform for transparently tracking company progress against commitments.

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<sup>9</sup> <http://www.onefuture.us/>

<sup>10</sup> EPA would work in collaboration with One Future to develop reporting protocols.



### *Scope*

Companies selecting this option would engage directly with One Future to establish their specific company-wide commitment and determine the organizational structure or level at which companies will make their commitments.

### *Benefits and Considerations*

A benefit to selecting to join One Future is that companies making this commitment have full flexibility to select the mix of emission reduction activities they will undertake to achieve their goal. The design also allows for changes in operations (e.g. acquisitions, divestments) without having to adjust a baseline. Since the commitment is focused on intensity-based goals, it implicitly includes recognition of historic action to reduce methane emissions.

A potential issue could be the possibility that companies are already near their target intensity, and their commitments therefore would not yield significant additional methane emission reductions. Therefore, EPA seeks feedback on how partner companies participating through the One Future option could be incentivized to continuously improve performance by reducing emissions below levels necessary to achieve One Future's target, if appropriate.

### **Other Potential Commitment Options**

While EPA is proposing the two options above for stakeholders to participate in this new Methane Challenge Program, we have also heard some interest in offering a third commitment option: the Emission Reduction (ER) Commitment. That type of approach is favored by some companies and offers the benefit of flexibility for companies that want to select the mix of sources they will address. EPA has not developed it as a full option at this time because, as described below, there are significant challenges with implementing this approach. However, given the interest in this approach that some have expressed, we welcome feedback on more fully developing this option contingent on addressing the identified challenges and having strong industry support.

### *Commitment*

If the ER commitment option is included within the Methane Challenge Program, companies selecting it would commit to reducing their methane emissions by a certain percentage from an agreed company-wide emissions baseline by a future date (to be determined by company). EPA would propose a minimum percentage reduction in company-wide methane emissions that companies would need to meet, and partner companies could choose that commitment target, or select a higher percentage. Companies would also indicate the year in which they anticipate achieving their target reduction rate. All participating companies would set targets from a common baseline established by EPA, which could be, for example, the average of 2013-2014 GHGRP Subpart W data, plus any supplemental data needed to complete the baseline information. These two years provide a recent data set, which would facilitate the provision of any retroactive supplemental data. Using the average of two years of data may help smooth any emissions fluctuations.

### *Scope*

It is anticipated that this commitment option could be undertaken at the corporate level, but EPA seeks comment from companies with a strong interest in this option with respect to the organizational level or structure at which companies would make this commitment.

### *Benefits and Considerations*

The ER commitment option would offer partner companies full flexibility to determine the exact mix of mitigation options they would implement to achieve their reduction commitments. By specifying an actual target, it would also drive emission reductions.

However, EPA has identified a number of challenges to implementing this approach:

- Any changes to a company's operations would need to be accounted for in an adjusted baseline, and tracking and adjusting the baseline operations and emissions could present a significant challenge, particularly in the upstream sector where acquisitions and divestitures of assets occur on a regular basis.
- EPA has already received feedback that an ER commitment could be problematic for companies that seek to expand their operations.
- Some stakeholders mentioned that the inclusion of voluntary supplemental data (e.g. for facilities below the GHGRP's reporting threshold of 25,000 metric tons CO<sub>2</sub>e per year) will mean that companies participating in the Program may show higher total emissions levels relative to their counterparts who are not participating in the Program.

### **Tracking Methane Challenge Program Progress**

One of the principal goals of the Methane Challenge Program is to transparently demonstrate partner company commitments and progress related to implementing mitigation options and reducing methane emissions from key methane sources throughout the oil and natural gas value chain. Therefore, all Methane Challenge partner companies would report on their voluntary mitigation actions that contribute to their commitments through a public platform managed by EPA. EPA also aims to minimize the reporting burden, to the extent possible, such that partner companies can focus time and resources on the actual implementation of methane-reducing activities. Because relevant oil and gas data are already collected by Subpart W of the GHGRP, EPA proposes to rely heavily on GHGRP Subpart W data to track progress in meeting commitments under the Methane Challenge Program.

Subpart W of the GHGRP already collects most of the information that would be relevant to tracking Methane Challenge Program commitments at the company level. However, it is anticipated that participating companies may need to provide some supplementary, voluntarily-supplied data to comprehensively track progress against their stated commitments. For example, voluntary supplementary data would be needed to show progress for facilities that do not report to the GHGRP because their emissions are less than the GHGRP reporting threshold of 25,000 metric tons CO<sub>2</sub>e, or for sources or mitigation activities not currently reported to the GHGRP.<sup>11</sup> Also, because the Methane Challenge Program is intended to incentivize and recognize voluntary actions, EPA is considering whether and how to collect supplementary data that enables the Program to distinguish company actions that are driven by regulation from those that are undertaken voluntarily in non-regulated environments or that go beyond regulatory requirements.

As part of the Methane Challenge Program implementation, EPA would provide a mechanism for companies to voluntarily report data elements that underpin their Program commitments. Though the exact mechanism is still under evaluation, EPA would create a streamlined reporting system that collects

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<sup>11</sup> For example, stakeholders in the distribution sector have indicated interest in potentially addressing emissions from distribution pipeline blowdowns and reporting the use of cast iron pipe liners, both of which are currently not reported to the GHGRP.





supplemental data needed to demonstrate progress against commitments and uses similar references and language as the current reporting forms used for collecting GHGRP data, in order to create a user-friendly system for reporting of voluntary data.

On an annual basis, relevant data on specific company actions (e.g. GHGRP data and voluntary supplementary data) would be rolled up to the partner company level to show progress against commitments.

- **BMP option:** activity and emissions data for the sources being targeted by the partner company would be presented on the Methane Challenge Program website. The website would list the partner company, its commitments, and annual data showing the activity data and emissions levels for the target sources, allowing for tracking of progress and emission reductions year on year.
- **One Future option:** the One Future program would use activity and emissions data reported into the Program (via GHGRP and supplementary data) to show company progress on the One Future website.<sup>12</sup>
- **ER option:** if it is adopted, the Methane Challenge Program website would show partner company commitments, and on an annual basis would roll up total emissions, in order to show year-to-year progress toward meeting the reduction goal.

Note that supplemental emissions data would be needed for all sources for the One Future or ER commitment options. For the BMP option, partners will provide supplemental data only for sources that have been selected by the company (e.g. if a partner chooses to focus on pneumatics and reciprocating compressors, the company will need to provide supplemental data only for those sources). The One Future and ER commitment options would also need this supplemental data provided for past year baseline emissions data.

To help promote the transparency and visibility of the Methane Challenge Program and of its member commitments and achievements, EPA envisions publicly releasing voluntarily submitted data. In addition, EPA would publish data submitted to the GHGRP as part of reporting under 40 CFR Part 98 that has not been determined to be confidential business information per GHGRP rulemakings.

## Recognition

EPA's goal in proposing the Methane Challenge Program is to balance providing incentives for ambitious commitments with appropriate flexibility to ensure that companies are confident in their ability to meet those commitments. EPA also strives to achieve the appropriate level of ambitious commitment in the Methane Challenge Program that facilitates industry participation while recognizing the efforts of companies that have gone "above and beyond" business as usual. EPA considers the commitments to have intrinsic merit, and therefore is not proposing a tiered system to "rank" commitments by partner companies. The options are designed with manageable first steps for partner engagement. The BMP option allows for expansion of commitments over time as appropriate to an individual company's ability to take on further reduction activities. The One Future option provides significant flexibility for participating companies committed to achieving its ambitious, performance-based target. EPA encourages feedback on potential recognition of outstanding performance in reducing emissions and/or achieving commitment goals, for example by setting aggressive timelines for completing a significant

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<sup>12</sup> The Methane Challenge Program website would list all participating companies. For companies participating in One Future, external links would be provided to the One Future website, which will track company progress on an on-going basis.



amount of mitigation actions. EPA is particularly interested in how to encourage companies to continue expanding the scope of their commitments to the extent they have already made significant progress. For example, partner companies could be recognized for achieving continuous improvement through expansion of program participation and commitment levels over time.

### **Continuous Improvement**

EPA will strive to promote continuous improvement in the Methane Challenge Program. Partner companies would have the opportunity, and would be encouraged, to expand their commitments at any time. This would allow for continued growth of emissions reductions and implementation of mitigation activities as companies make progress in reaching existing commitments.

EPA is interested in potential mechanisms that would allow for continuous improvements in the Program over time in order to address the greatest emission reduction opportunities and help to contribute to the Administration's 2025 methane reduction target. For example, the Program will seek to encourage new and innovative BMPs, as well as methodologies for monitoring and measuring progress. At the launch, the Program would have basic agreement and understanding with partners about the BMPs to choose from to meet commitments, based on known mitigation activities already implemented in oil and gas operations. This would underpin the list of acceptable mitigation practices associated with each source in the BMP commitment option, as well as any supplemental data elements that would need to be collected to support partner company reporting of specific mitigation actions for the One Future or ER option. The final Methane Challenge Program document will outline a process for partner companies to alert EPA to any new "pilot" mitigation activities that they are testing, to potentially include these activities in the Program if they prove to be at least as effective as mitigation activities already recognized by the Program.

In support of the Methane Challenge Program's goal of promoting continuous improvement, the EPA will coordinate with other entities, as appropriate, to stimulate the development and validation of new methodologies to identify, quantify, and mitigate methane emissions. Such actions could boost existing partner participation, and encourage new companies to take on Methane Challenge commitments. For example, the U.S. Department of Energy, in collaboration with the National Energy Technology Laboratory, could undertake work to support new applications for methane mitigation and monitoring technology, including in the context of pilot projects.

### **Methane Challenge Partner Benefits**

The Methane Challenge Program would provide companies with the opportunity to transparently showcase systematic and comprehensive actions to reduce methane emissions and be publicly recognized as leaders in reducing methane emissions in the U.S. At the company level, doing so reduces operational risk, increases efficiency, and demonstrates company concern for the environment, with benefits spanning from climate change to air quality improvements to conservation of a non-renewable energy resource.



## Next Steps

This proposal is intended to outline EPA's concept for the framework of the proposed Methane Challenge Program. EPA encourages all stakeholders to closely review and provide feedback on any and all elements of the proposed Program. EPA will carefully consider and evaluate all feedback received and is requesting comments by September 1, 2015. Interested stakeholders can submit comments through the Program website [www.epa.gov/gasstar/methanechallenge](http://www.epa.gov/gasstar/methanechallenge) or via e-mail to [methanechallenge@tetrattech.com](mailto:methanechallenge@tetrattech.com), or can request meetings by contacting Carey Bylin at 202-343-9669 or [bylin.carey@epa.gov](mailto:bylin.carey@epa.gov). EPA will also be organizing sector-specific webinars in July; webinar details can be found on the Program website.

EPA plans to continue to work through technical and implementation details with input from stakeholders. In particular, EPA will work with companies indicating significant interest in joining the Program, to ensure that implementation details meet both EPA's and partner companies' needs. As a result of regulatory developments in process, there may be a phase-in of coverage of certain sources and sectors within the Program.<sup>13</sup>

EPA intends to launch the Methane Challenge Program by the end of 2015, possibly in conjunction with the next Natural Gas STAR Annual Implementation Workshop in November 2015. More details about the launch will be forthcoming.

## Proposed Timeline<sup>14</sup>

Milestone	Anticipated timeframe
Publish proposed Methane Challenge Program	July 2015
Sector-specific webinars	July 2015
Collect stakeholder feedback	Through September 1, 2015
Revise and finalize Methane Challenge Program	October 2015
Outreach, confirmation of charter partners	Ongoing from October 2015
Launch event with commitments from charter partners	By end of 2015
First full year of Program implementation and data collection begins	January 1, 2016
Development of systems for tracking and collecting data	Summer/Fall 2016
First annual progress reports / data collection due	Spring 2017
First Program data published	Fall 2017

<sup>13</sup> Per the January 14, 2015 announcement: "Building on five technical white papers issued last spring, the peer review and public input received on these documents, and the actions that a number of states are already taking, EPA will initiate a rulemaking effort to set standards for methane and VOC emissions from new and modified oil and gas production sources, and natural gas processing and transmission sources... In developing these standards, EPA will work with... stakeholders to consider a range of common-sense approaches that can reduce emissions from the sources discussed in the agency's Oil and Gas White Papers, including oil well completions, pneumatic pumps, and leaks from well sites, gathering and boosting stations, and compressor stations. (<https://www.whitehouse.gov/the-press-office/2015/01/14/fact-sheet-administration-takes-steps-forward-climate-action-plan-anno-1>)

<sup>14</sup> Proposed timeline reflects goal to launch Methane Challenge Program by end of 2015.



## Questions for Stakeholders

EPA encourages stakeholders to provide comments on any and all aspects of the proposed Methane Challenge Program. EPA will carefully consider and evaluate all feedback received through July 2015. To the extent appropriate, applicable, and consistent with the aims of the Methane Challenge Program, this feedback will be incorporated into a revised framework document.

Following are specific areas in which EPA encourages stakeholders to provide feedback by September 1, 2015:

1. Please indicate whether your company has specific interest in one of the commitment options presented, including the possibility or likelihood of your company potentially making that commitment.
2. In addition to recognition through the Program, what are the key incentives for companies to participate in this Program? Should EPA offer some partners extra recognition, such as awards?
3. EPA is proposing to launch the Program with charter partners by the end of 2015, but will welcome new partners on an ongoing basis. Please comment on the likelihood of your company committing to join this Program as a charter partner, or at a future date.
4. For the BMP option, how can EPA encourage companies to make commitments for sources for which they have not made significant progress in implementing mitigation options? In other words, how can companies be encouraged to participate beyond the sources for which they have already made significant progress?
5. Please provide comments on the sources and corresponding BMPs that are provided in Appendix 2, including any recommended additions, deletions, or revisions.
6. Please comment on the proposed definitions of the companies or entities that will make BMP commitments, per Appendix 3.
7. Is a 5-year time limit to achieve BMP commitments appropriate? If not, please provide alternate proposals. Would a shorter time limit encourage greater reductions earlier?
8. Should EPA offer the ER commitment option? If so, please provide specific recommendations for ways that EPA could address the implementation challenges outlined in this document. What is the minimum target company-specific reduction level that should be set for participation in this option? Would your company use this option if it were offered?
9. To what extent is differentiating the voluntary actions from regulatory actions important to stakeholders? What are the potential mechanisms through which the Program could distinguish actions driven by state or federal regulation from those undertaken voluntarily or that go beyond regulatory requirements?
10. EPA plans to leverage existing reported data through the GHGRP (Subpart W) in addition to supplemental data that partners would submit to EPA. Would the e-GGRT system be an appropriate mechanism to collect the voluntary supplemental data?
11. Would companies be willing and able to make commitments related to emission sources where EPA has proposed, but not yet finalized, new GHGRP Subpart W requirements?
12. EPA seeks feedback on potential mechanisms for encouraging continued, active participation in the Program once a company's initial goals have been achieved.
13. EPA is proposing to call this new voluntary effort the "Natural Gas STAR Methane Challenge Program", and welcomes comments and suggestions on this name.

**Appendix 1: Proposed Sources for BMP Commitment Option**

The following table lists recommended methane emission sources that EPA is considering for inclusion in the BMP commitment option at the time of program launch.<sup>15</sup> EPA welcomes comment on this list of focal sources.

Sectors	Sources
Onshore Production and Gathering and Boosting	Pneumatic Controllers
	Equipment Leaks/Fugitive Emissions
	Liquids Unloading
	Pneumatic pumps (only Chemical Injection Pumps (CIP))
	Tanks
Natural Gas (NG) Processing	Reciprocating Compressors-venting
	Centrifugal Compressors-venting
NG Transmission & Underground Storage	Reciprocating Compressors-venting
	Centrifugal Compressors-venting
	Equipment Leaks/Fugitive Emissions
	Pipeline Venting & Blowdowns
	Pneumatic Controllers
NG Distribution	M&R Stations/City Gates
	Mains – Cast Iron, Not Cathodically Protected Steel (Bare and Coated)
	Services
	Blowdowns
	Excavation Damages

<sup>15</sup> EPA may add new sources to this list in the future.



## Appendix 2: Proposed BMPs for BMP Commitment Option

The following table provides high-level information on recommended sources and corresponding BMPs that EPA is considering for inclusion in the BMP commitment option. EPA plans to continue to work through technical and implementation details with input from stakeholders and will include more specific BMP guidance in the final program proposal. The table also includes specific proposed exclusions to the company-wide implementation of best practices.<sup>16</sup>

Sectors	Sources	BMPs
Onshore Production and Gathering and Boosting	Pneumatic Controllers	For gas-driven pneumatic controllers, use low- (defined as gas bleed rate < 6 standard cubic feet/hour) or no-bleed controllers for all applications except those requiring high-bleed controllers for certain purposes, including operational requirements and safety.
	Equipment Leaks/ Fugitive Emissions	Undertake monitoring and repair activities, at specified minimum intervals, following defined parameters governing repair activities.
	Liquids Unloading	Reduce methane emissions from liquids unloading actions during which gas is vented.
	Pneumatic pumps (only CIP)	Implement no- or low-emitting pumps, such as solar or electric pumps, or route bleed gas to flare or gas capture/use.
	Hydrocarbon Storage Tanks	Route gas to capture/use (e.g., VRU) or route gas to flare.
Natural Gas (NG) Processing	Reciprocating Compressors-venting	Route rod packing vent to capture/use or route gas to flare or replace rod packing every 26,000 hours of operation or every 36 months.
	Centrifugal Compressors-venting	Route wet seal de-gassing vent to capture/use or route wet seal de-gassing to flare.

<sup>16</sup> This is additive to the proposal on page 6 that partners could request an exemption to full implementation for each source commitment. Such exemptions could be considered on the condition that the exempted sources (basically, those for which a mitigation option is not implemented) would not represent a significant portion of methane emissions from that source, and would be transparently documented in annual results to provide context for company achievements. EPA is requesting feedback on how to structure the potential exemption option.



PROPOSAL FOR STAKEHOLDER FEEDBACK – 7-23-15



Sectors	Sources	BMPs															
NG Transmission & Underground Storage <sup>17</sup>	Reciprocating Compressors-venting	Same as above.															
	Centrifugal Compressors-venting	Same as above.															
	Compressor Station Equipment Leaks/ Fugitive Emissions	Undertake monitoring and repair activities, at specified minimum intervals, following defined parameters governing repair activities.															
	Pipeline Venting & Blowdowns	Maximize gas recovery and/or emission reductions through the use of a combination of in-line compression (when available) to maximum engineering potential, and route remaining gas to portable compression or flare. Excludes emergency blowdown situations.															
	Pneumatic Controllers	Same as above.															
NG Distribution	M&R Stations/City Gates	Undertake monitoring and repair activities, at specified minimum intervals, following defined parameters governing repair activities.															
	Mains – Cast Iron, Unprotected Steel	Replace/line/seal cast iron pipes or replace/cathodically protect unprotected steel pipes at a specified annual rate. EPA is evaluating the detailed specifications of this BMP and is requesting feedback on approach in general as well as the following proposal for rate of replacement received through Gas STAR Gold Feedback: <table><tr><th>Tier</th><th>Inventory of Cast Iron and Unprotected Steel Mains</th><th>% Annual Replacement</th></tr><tr><td>Tier 1</td><td>&lt;500 miles</td><td>6.50%</td></tr><tr><td>Tier 2</td><td>500 - 1,000 miles</td><td>5%</td></tr><tr><td>Tier 3</td><td>1,001 - 1,500 miles</td><td>3%</td></tr><tr><td>Tier 4</td><td>&gt; or = 1,500 miles</td><td>2%</td></tr></table>	Tier	Inventory of Cast Iron and Unprotected Steel Mains	% Annual Replacement	Tier 1	<500 miles	6.50%	Tier 2	500 - 1,000 miles	5%	Tier 3	1,001 - 1,500 miles	3%	Tier 4	> or = 1,500 miles	2%
	Tier	Inventory of Cast Iron and Unprotected Steel Mains	% Annual Replacement														
	Tier 1	<500 miles	6.50%														
	Tier 2	500 - 1,000 miles	5%														
	Tier 3	1,001 - 1,500 miles	3%														
	Tier 4	> or = 1,500 miles	2%														
Services	Evaluation of BMPs in progress.																
High-Pressure Pipe Blowdowns	Maximize gas recovery and/or emission reductions through the use gas to capture/use, flaring, hot tapping, and/or squeezing.																
Excavation Damages	Reduce damages at target rate per thousand locate calls and shorten average time to shut-in for all damages by a minimum percentage.																

<sup>17</sup> EPA has received, and is considering, a proposal to structure BMP coverage of natural gastransmission and storage compressor stations as a Directed Inspection and Maintenance Program.



### Appendix 3: Proposed Organization Structure for BMP Commitments

This appendix offers proposed levels at which companies would make commitments under the Methane Challenge BMP commitment option.<sup>18</sup> To the extent that companies operate in more than one sector, they have the option to make BMP commitments in one or more sector. In considering this proposal, companies should note that they may have multiple facilities reporting to GHGRP Subpart W. Companies should also consider relevant regulations that cover their operations and the ability to demonstrate voluntary action within a given organizational structure.

EPA encourages stakeholders to provide feedback on these proposals.

Onshore Production: Division or Business Unit Level, defined as a separately managed division or unit of an enterprise with strategic and/or operational objectives that may be distinct from the parent unit and other divisions or business units. A division or business unit typically targets a specific market or business or operational concern, which requires a production or management specialty and approach.

Natural Gas (NG) Processing: Division or Business Unit Level, defined as a separately managed division or unit of an enterprise with strategic and/or operational objectives that may be distinct from the parent unit and other divisions or business units. A division or business unit targets a specific market or business or operational concern, which requires a production or management specialty and approach.

NG Transmission Compression and Underground Storage: a natural gas transmission company operating an inter- or intra-state transmission pipeline system as regulated/defined by FERC or an individual state.

NG Distribution: a local distribution company as regulated by a single state public utility commission.

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<sup>18</sup> One Future has its own parameters for partner participation.



**From:** Browne, Cynthia  
**Location:** Joe to call Tom's cell: 202-413-2059  
**Importance:** Normal  
**Subject:** ONE Future Discussion  
**Start Date/Time:** Fri 2/19/2016 5:00:00 PM  
**End Date/Time:** Fri 2/19/2016 5:30:00 PM  
Re: Time to touch base on ONE Future?

**To:** Tom Michels[tmichels@bwstrategies.com]  
**Cc:** Browne, Cynthia[Browne.Cynthia@epa.gov]  
**From:** Goffman, Joseph  
**Sent:** Wed 2/17/2016 9:05:08 PM  
**Subject:** Re: Time to touch base on ONE Future?

Thanks, Ted. Let's have Cynthia set up a time.

- Joseph Goffman  
Sent from my iPhone

On Feb 17, 2016, at 4:00 PM, Tom Michels <[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)> wrote:

Hi Joe,

I am writing to see if you might have a moment this week to touch base on the ONE Future Coalition? We are finally dotting the I's and crossing the t's on our mechanisms and interplay with the Methane Challenge, but I wanted to exchange some ideas on how we see things moving forward if you have some time.

I happy to set up a time to talk, or you can call my cell at your convenience: (202) 413-2059. Would be grateful for any time you can spare. Thanks!

Tom

Tom Michels

Executive Director,

**ONE Future Coalition**

[www.onefuture.us](http://www.onefuture.us)

Principal,

**BlueWater Strategies llc**

25 Massachusetts Avenue, NW

Suite 820

Washington, DC 20001

[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)

Direct – 202-589-1759

Office – 202-589-0015

Mobile –202-413-2059

*This message may contain information that is privileged or confidential. If you receive this transmission in error, please notify the sender by reply e-mail and delete the message and any attachments.*

**From:** Browne, Cynthia  
**Location:** NMA office, 101 Constitution Avenue, NW, Suite 500E, Washington, DC 20001  
**Importance:** Normal  
**Subject:** Speech: International Committee Quarterly Meeting Deeper Dive  
**Categories:** Green Category  
**Start Date/Time:** Fri 9/25/2015 6:00:00 PM  
**End Date/Time:** Fri 9/25/2015 7:00:00 PM  
**FW:** Any luck  
NMA International Meeting docxv2 ID pmf.docx

**To:** mbarbanell@barrick.com[mbarbanell@barrick.com]  
**Cc:** Browne, Cynthia[Browne.Cynthia@epa.gov]; Goffman, Joseph[Goffman.Joseph@epa.gov]  
**From:** Dennis, Allison  
**Sent:** Wed 9/2/2015 5:52:15 PM  
**Subject:** FW: Any luck  
Janet McCabe Event Form (2) (2).docx

Hi Melissa,

Both William and Joe Goffman are delighted to take part in your meeting on Sept. 25<sup>th</sup> from 2- 3 pm. I am happy to serve as your point of contact going forward and will be in touch closer to this event. Thanks again for reaching out and including EPA in your meeting! /Allison

Begin forwarded message:

**From:** "Barbanell, Melissa" <mbarbanell@barrick.com>  
**Date:** September 2, 2015 at 11:44:50 AM EDT  
**To:** "Niebling.william@epa.gov" <Niebling.william@epa.gov>  
**Subject:** Any luck

Hi William,

I just wanted to see if you have found someone yet. If at all possible to let us know today, that would be greatly appreciated. We are anxious to send out a note today.

Thanks,

Melissa

## Event Information Form

This form has been designed to assist in planning participation in events and activities.  
This is not a confirmation of DAA Janet McCabe's attendance.

### Basic Background

Name of Event	International Committee Quarterly Meeting Deeper Dive
Sponsoring Organization	National Mining Association
Date of Event	September 25 <sup>th</sup>
Time of Event	2pm
Expected time of remarks or participation by DAA McCabe	2pm-3pm
Location (please include city/town and street address)	101 Constitution Ave NW, Suite 500E Washington DC 20001
Directions to the event (if appropriate, please also include relevant information about parking, the specific building, and best entrance to use)	n/a
Where to meet POC	NMA office lobby Suite 500E

### Event Description and Role of the DAA

Brief description or outline of the event	<p>NMA's International Committee (IC) focuses on engagement in the international arena to enhance the association's members' attention to the national consequences of global developments in the mining sector.</p> <p>The primary purpose of the IC is to inform the membership of international issues that may impact the sector and facilitate a platform for discussion and engagement opportunities.</p> <p>To add value and increase opportunities for discussion and understanding there is an additional component of the IC meeting, called The Deeper Dive. The Deeper Dive focuses on one particular item of interest to member companies, includes an external presenter and provides an opportunity for a detailed and informal Q&amp;A on that topic.</p>
Brochure, invitation and/or other event material(s)	None
Agenda and order of speakers and biography/information of other speakers	No other speakers
Name of person introducing DAA McCabe	Melissa Barbanell
Basic information about the role of the DAA official at the event. (For example, will they	Keynote speaker for the "Deeper Dive" component of the international committee meeting.

serve as a keynote speaker? Participate on a panel? Take part in a press conference? Tour a facility?)	
If the DAA official is a featured speaker, which topic(s) should they address and how long?	The focus should be on the road to Paris and the implications of global climate policy in the United States. A discussion of U.S. climate policy would also be of interest.
What rules would the audience like to hear about?	The focus of the discussion should be on the international policy arena; in talking about how this has influenced U.S. policy, it would be reasonable to anticipate a discussion of the Clean Power Plan and other upcoming climate-related rules.
Will there be time for Q&A? If so, who will be moderating?	Yes, Melissa Barbanell
Do you have a sense of the types of questions that may be asked?	Questions are likely to be focused on the range of potential outcomes of the Paris meeting and the Clean Power Plan implementation.
Recommendations on the use of visuals/PowerPoint. Should the DAA official plan on using a PowerPoint Presentation?	DAA's preference.
What is the physical layout of the room (e.g. size, and format of the interaction; podium, seated in armchair dialogue, or at a table, etc.)	Conference room with long rectangular table. Seated informal presentation and discussion/questions

#### About the Audience

Please tell us about the make-up of the audience for the event:	Participants will only be NMA members, no press or other external parties.
Expected number in attendance at the event	Unconfirmed (perhaps 20)
Will it be largely members of your organization?	Only members of the association
Will others be in attendance? If so, who will be at the event? (General public, Businesspeople, Educators, Families, Students – what grade level, Children – how old)	no
Others? (Please describe)	none
Is the event open to press?	no

#### Contact Information

Your name:	Melissa Barbanell
Telephone Number:	801-990-3815
Mailing Address:	Melissa Barbanell Barrick Gold Corporation 460 West 50 North, Suite 500 Salt Lake City, UT 84101
E-Mail Address:	<a href="mailto:mbarbanell@barrick.com">mbarbanell@barrick.com</a>
Cell Phone Number:	801-915-2674
Fax Number:	801-359-0875
Best way to reach you at the event?	cell phone

EPA Contact Person

Emily Atkinson, Administrative Assistant to Janet McCabe: 202-564-7403

Andrea Drinkard, Public Affairs Specialist: 202-564-1601



**NMA International Meeting  
September 24, 2015  
2 – 3 pm  
30 min of remarks, followed by Q&A**

**INTRO**

- Thanks, Melissa. And thank you for inviting me and Will here today. I believe you heard from Janet and Debbie on Tuesday who presented at the Environment Committee meeting. It will hard to top their performance, but we'll give it shot.
- Today, I'd like to give you a quick overview of our domestic climate policy and the actions we are taking. I'd then like to touch on how these actions fit into the international climate policy arena, especially in light of current preparations for the UN climate negotiations in Paris in December.
- I'd like to save some time for questions and discussion too. So, with that, let's get started.

**OVERVIEW OF ACTIONS UNDER THE CAP**

- As everyone in the room is probably already aware, two years ago President Obama announced his Climate Action Plan that committed the U.S. to cutting carbon pollution at home, preparing for the climate impacts we can't avoid, and leading the world on taking action against climate change.
- EPA is taking steps in five key areas...

**Clean Power Plan:**

- Last month, President Obama and EPA Administrator Gina McCarthy announced the final Clean Power Plan, our historic rule to cut carbon pollution from power plants – the nation’s largest source of the carbon pollution that fuels climate change.
- In addition to the final Clean Power Plan for existing power plants, we also proposed a Federal Plan and Model Rule that demonstrates options for how states can implement the Clean Power Plan.
- The agency also finalized standards for new, modified and reconstructed power plants.
- When the plan is fully in place in 2030, carbon pollution from the power sector will be 32 percent below 2005 levels and dropping — about 870 million tons less of carbon pollution in 2030, and even more in future years as the momentum continues.
- The transition to cleaner sources of energy will better protect Americans from other harmful air pollution, too. By 2030, emissions of SO<sub>2</sub> from power plants will drop 90% compared to 2005 levels, and emissions of NO<sub>x</sub> from power plants will drop 72%.
- By securing the trend toward a cleaner power sector and getting even more pollution reductions, the Clean Power Plan puts the nation on the fast track to cut climate and air pollution to historically low levels—
- Consistent with the President’s commitment to reliable, affordable power and advancing cleaner energy technologies.

## **Oil and Gas:**

- Beyond addressing carbon pollution from power plants, the President's Climate Action Plan also instructed EPA to address methane emissions. So, last month, we also proposed a suite of oil and gas rules and guidelines that will help combat climate change, reduce air pollution, and provide greater certainty to industry about permitting requirements.
- These proposals would:
  - reduce methane from hydraulically fractured oil wells,
  - extend emission reduction requirements to further "downstream" equipment in the natural gas transmission segment of the industry (the segment is currently not regulated by EPA's 2012 rules),
  - require leak repair, and
  - clarify permitting requirements in states and Indian country.

## **Methane Challenge:**

- The White House also asked EPA to pursue voluntary approaches for reducing methane emissions, such as expanding the agency's successful Natural Gas STAR Program.
- In late July we released for comment our new Natural Gas Star Methane Challenge program. This program would provide a new way for oil and gas companies to make and track ambitious commitments to reduce methane while realizing significant methane reductions in a quick, flexible, cost-effective way.
- EPA is collecting feedback through October 13, 2015, and will launch

the Methane Challenge Program by the end of the year.

### **HDV PHASE 1&2 GHG STANDARDS:**

- Switching gears....this Administration has spent enormous effort to develop and implement standards to reduce carbon pollution from cars and light trucks.
- During the President's first term, EPA issued fuel economy and greenhouse gas standards for light duty cars and trucks, beginning with model year 2012 and become increasingly stringent through model year 2025. These standards are projected to reduce carbon pollution by 6 billion tons over the lifetime of vehicles sold, double fuel economy by 2025, all while saving consumers \$1.7 trillion at the pump.
- We also developed similar standards, for the first time, for heavy duty vehicles. The President's Climate Action Plan directed us to develop a second round of heavy-duty GHG and fuel efficiency standards for post-2018 heavy-duty vehicles, and on June 19<sup>th</sup> we did just that.

### **HFCs**

- The President's Climate Action Plan also addresses the rapidly increasing use of hydrofluorocarbons (HFCs), a class of potent greenhouse gases used in air-conditioning, refrigeration, and other equipment. Absent any action, In the United States, HFC emissions are expected to nearly double by 2020 and triple by 2030
- The Climate Action Plan calls on this Administration to lead through both domestic action and international diplomacy. We are making significant progress on both fronts.

## **ACTIONS UNDER SNAP**

- The President directed the EPA to use its authority through our SNAP—Significant New Alternatives Policy-- Program to encourage private sector investment in low-emissions technology by identifying and approving climate-friendly chemicals while prohibiting certain uses of the most harmful chemical alternatives.
- During the past year, EPA has taken four actions under SNAP. Three of these expanded the list of climate-friendly alternatives and one changed the status of certain high GWP HFCs to unacceptable in favor of newer options that offer better climate protection without harming the ozone layer.
- These actions are making a real difference. For example, the change of status rule will avoid emissions of up to 64 million metric tons of carbon equivalent in the year 2025. This is equal to the carbon dioxide emissions from the annual energy use of more than 5.8 million homes.
- **On the international front**, EPA is working with Department of State and other parts of the government towards securing an amendment to the Montreal Protocol to phase down HFCs that is acceptable to all countries.
- We have made significant political progress towards building support for an amendment and we very much appreciate your support in reaching out to key developing countries on this subject.

## **Other CAP International Efforts**

- We are also collaborating with our federal partners at the State Department to engage our international partners on methane and black carbon reductions from oil and natural gas production.
- EPA is focused not only on CO2 emission reductions, but also on non-CO2 emissions, including methane and HFCs, and we continue our participation in CCAC to engage in solid waste, transportation, and HFC work including our work through the Montreal Protocol.

### **Everyone has a role to play**

- As you can see, this Administration has really stepped up its actions for controlling greenhouse gasses under existing laws. We've made serious progress during these last couple of years too—from the way we produce energy, to the way we use it. And we're already seeing results that prove we can get the job done while growing the economy.
- Today, the U.S. is generating three times as much wind power, and 20 times as much solar power as we when President Obama took office. Since the beginning of 2010, the average cost of a solar electric system in the U.S. has dropped by 50 percent. And at the same time, the U.S. solar industry is creating jobs 10 times faster than the rest of the economy.
- We've made unprecedented investments to cut energy waste in U.S. homes, buildings, and appliances—actions that will save consumers billions of dollars. And we're investing in innovation. In August, the President announced a set of new commitments to promote the development of smart, low-cost technologies that help households save on their energy bills. This includes millions of dollars for state-based

projects aimed at building technologies that vastly increase the amount of energy each solar panel can produce from the sun.

- We've also seen the U.S. private sector step up in a huge way. This summer, Google, Apple, Goldman Sachs and 10 more of America's largest companies pledged 140 billion dollars to help fight climate change.
- These actions add up. They add up to major health protections for American families and they add up to major economic opportunity.
- But, we aren't the only stepping up to do our part.
- Last November, President Obama and President Xi Jinping of China made an historic Joint Announcement of our intended GHG reduction targets, with China agreeing for the first time to a peak year for its CO<sub>2</sub> emissions of around 2030 and to an ambitious target of 20 percent clean energy in its energy mix by 2030.
- The US intends to reduce economy-wide GHG emissions by 26-28% below its 2005 level in 2025. This target is both ambitious and achievable, grounded in an intensive analysis of what can be done under existing law. It is consistent with achieving deep, economy-wide reductions of over 80 percent by 2050. It roughly doubles the pace of emission reductions for the period 2020-2025 as compared to 2005-2020.
- This summer, Presidents Obama and Brazil's President Dilma Rousseff commit to intensify collaboration between the United States and Brazil, both bilaterally and under the United Nations Framework Convention on Climate Change (UNFCCC), to address climate change. At that meeting, Brazil's President announced that his government would

pursue policies aimed at eliminating illegal deforestation, coupled with ambitious enhancement of carbon stocks through reforestation and forest restoration.

## **PARIS**

- So let's talk about the road ahead.
- In preparation for the U.N. Framework Convention on Climate Change Conference of Parties (COP21) in Paris in December, countries have agreed to publicly state what actions they intend to take under a new international agreement.
  - So far countries representing over almost 60% of global CO<sub>2</sub> emissions have either announced or formally reported their targets. There have been 39 Intended Nationally-Determined Commitments (INDCs) submitted, including the United States, EU, Russia, China, Japan, Canada and Mexico).
  - The U.S. applauded Mexico as the first emerging economy to submit its INDC, which committed the country to reduce unconditionally 25% of its GHGs and SLCPs emissions for the year 2030.
- Success of the Paris agreement should not be solely measured from the outcomes of the Paris COP but in securing domestic implementation of climate mitigation activities from those countries with the capabilities to do so.
- The Final Agreement in Paris Needs to Include Key Features:
  - First, the outcome needs to be ambitious. The core objective of the 1992 Framework Convention is to avoid dangerous climate change,



so we need to reduce emissions as effectively as possible. The first step is for countries to come forward with strong, timely targets (known as “INDCs” – Intended Nationally Determined Contributions).

- Second, we need to elevate the importance of adaptation. Countries need to do sound adaptation planning and to implement those plans in order to build resilience to the impacts of climate change.
- Third, the agreement needs to be fair to all and relevant to a dynamic and evolving world. What we expect from countries should capture their varying circumstances and capabilities.
- Fourth, the outcome needs to ensure strong, ongoing financial assistance, especially aimed at adaptation for the most vulnerable, like small islands and African states, consistent with the robust measures taken in recent years.
- And, fifth, the agreement will require enhanced reporting from all Parties to promote transparency.

## **Other International Activities on Climate Change and Air Quality**

### Global Methane Initiative – Coal Mine Methane efforts

- EPA supports the Global Methane Initiative, a voluntary, multilateral partnership that aims to reduce global methane emissions and to advance the abatement, recovery and use of methane as a valuable clean energy source.
- The Initiative achieves this through an international network of partner governments, private sector members (such as yourselves), development banks and nongovernmental organizations that work to

build capacity, develop strategies and markets, and remove barriers to project development for methane reduction in partner countries.

- The Initiative focuses on five main methane emission sources: agriculture, municipal solid waste, wastewater, oil and gas systems, and coal mines.
- The implementation of cost-effective methane emission reduction initiatives in the coal industry can yield substantial economic and environmental benefits, such as improved mine safety, greater mine productivity, increased revenues, and reduced greenhouse gas emissions.
- We appreciate the leadership of US companies in recovering and using coal mine methane. In 2013, U.S. companies prevented domestic methane emissions of 9.6 million metric tons of carbon dioxide equivalent by capturing and using this valuable fuel. Since 1994, such activities have achieved cumulative greenhouse gas reductions of nearly 163 million metric tons of carbon dioxide equivalent.
- We recognize the important role that NMA played in launching the Global Methane Initiative (back in 2004 as the Methane to Markets Partnership) and showcasing the important opportunities to reduce methane emissions from coal mining activities.

#### Update on Minamata Convention on Mercury

- As no doubt most of you are aware, the Minamata Convention is a new global agreement to protect human health and the environment from the adverse effects of mercury. EPA worked closely with the State

Department and other federal agencies in the negotiation of this agreement.

- The US was a leader in helping to negotiate the Convention and became the first country to join the Convention in November 2013. 12 other countries have ratified and the Convention will enter-into-force after 50 countries have joined.
- The Convention calls for parties to:
  - control and reduce mercury air emissions from a number of industrial sources
  - reduce or eliminate the use of mercury in certain products and industrial processes,
  - reduce the supply of mercury by, among other things, ending primary mercury mining.
- The agreement also calls on governments to address the use of mercury in artisanal and small-scale gold mining, and includes provisions on mercury storage and waste.
- All countries who become parties are subject to the same obligations – there is no differentiation between developed and developing countries.
- Currently, EPA is participating on an international technical expert group that is developing guidance on mercury emissions from listed industrial sources.
  - This includes “smelting and roasting operations used in the production of non-ferrous metals” (specifically lead, zinc, copper and industrial gold).
- After a public review period this summer, the guidance is being prepared for consideration at the seventh meeting of the Intergovernmental

Negotiating Committee in March 2016.

- We greatly appreciate the active engagement of the international mining industry throughout the negotiations and the development of guidance, and in particular the contribution of Melissa [Barbenell] in her work associated with the technical expert group.
- The Convention is an extraordinary opportunity for the global community – governments, industry, other NGOs - to work collaboratively on reducing mercury in the environment. We look forward to its entry into force and implementation over the coming years.

#### UN Environment Assembly Resolution on Air Quality

- The health impacts of air pollution are growing, particularly in developing countries where rapid urbanization has been accompanied by dangerous levels of air pollution (e.g, New Delhi, Lagos, Sao Paulo).
- In response, last year, at the first UN Environment Assembly, a resolution was adopted that encourages governments to address this problem by implementing action plans to address air pollution and setting air quality and emission standards,
- We expect an increase in international efforts to enhance capacity in developing countries to address air pollution from key sources, and that the bar will gradually be raised in these countries in terms of emission standards and air quality.

#### **CONCLUSION**

- Looking ahead to Paris...I'm confident. The world clearly has mobilized, and we're in position to drive toward a global solution that has eluded us

for far too long. And, our President has shown strong leadership and taken ambitious action here at home.

- With that, Will and I would love to take your questions....

**From:** cmoran@cpg.com

**Location:** 1200 Pennsylvania Avenue, NW, William Jefferson Clinton Building, Washington,  
DC 20460

**Importance:** Normal

**Subject:** Declined: FW: ONE Future Meeting | Conference: [Ex. 6 - Personal Privacy] Participant Code:

[Ex. 6 - Personal Privacy]

**Start Date/Time:** Tue 12/1/2015 5:00:00 PM

**End Date/Time:** Tue 12/1/2015 6:00:00 PM

**To:** Mark Boling[Mark\_Boling@SWN.COM]  
**From:** Goffman, Joseph  
**Sent:** Tue 3/29/2016 7:47:01 PM  
**Subject:** Methane Challenge public statement

Hi, Mark

Thanks for taking the time to chat this AM.

In tomorrow's public statements on the Methane Challenge, we plan to include this sentence:

“EPA expects program participation to grow over time and is actively working to expand the options for participation by finalizing an additional Emissions Intensity Commitment option through the ONE Future Coalition. ONE Future is a coalition of natural gas companies focused on increasing efficiency across the natural gas supply chain.”

Joseph Goffman

Associate Assistant Administrator for Climate

and Senior Counsel

Office of Air and Radiation

US EPA

Washington, DC.

**To:** Tom Michels[tmichels@bwstrategies.com]  
**Cc:** Browne, Cynthia[Browne.Cynthia@epa.gov]  
**From:** Goffman, Joseph  
**Sent:** Thur 3/17/2016 9:42:52 PM  
**Subject:** Re: Time for a quick call?

Cynthia can get something on the calendar. Thanks.

- Joseph Goffman  
Sent from my iPhone

On Mar 17, 2016, at 5:41 PM, Tom Michels <[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)> wrote:

It is indeed - just say when works. Thank you!

Tom Michels  
Office - [202-589-0015](tel:202-589-0015)  
Direct - [202-589-1759](tel:202-589-1759)  
Mobile - [202-413-2059](tel:202-413-2059)

*Sent from my mobile. Please pardon any typos.*

On Mar 17, 2016, at 5:37 PM, Goffman, Joseph <[Goffman.Joseph@epa.gov](mailto:Goffman.Joseph@epa.gov)> wrote:

Happy to do it, Tom. Much appreciate your reaching out. Monday would be better, if that, in fact, is an option. Thanks.

- Joseph Goffman  
Sent from my iPhone

On Mar 17, 2016, at 5:35 PM, Tom Michels <[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)> wrote:

Joe,

I wanted to see if you might have time for a 15 minute call with me tomorrow or Monday to touch base on where ONE Future is vis-à-vis our involvement with EPA Methane Challenge. I know you're under a ton of pressure these days, but any time you could spare would be much appreciated!



All the best,

Tom

Tom Michels

Executive Director,

**ONE Future Coalition**

[www.onefuture.us](http://www.onefuture.us)

Principal,

**BlueWater Strategies llc**

25 Massachusetts Avenue, NW

Suite 820

Washington, DC 20001

[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)

Direct – 202-589-1759

Office – 202-589-0015

Mobile –202-413-2059

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**To:** Tom Michels[tmichels@bwstrategies.com]  
**From:** Goffman, Joseph  
**Sent:** Thur 3/17/2016 9:36:55 PM  
**Subject:** Re: Time for a quick call?

Happy to do it, Tom. Much appreciate your reaching out. Monday would be better, if that, in fact, is an option. Thanks.

- Joseph Goffman  
Sent from my iPhone

On Mar 17, 2016, at 5:35 PM, Tom Michels <[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)> wrote:

Joe,

I wanted to see if you might have time for a 15 minute call with me tomorrow or Monday to touch base on where ONE Future is vis-à-vis our involvement with EPA Methane Challenge. I know you're under a ton of pressure these days, but any time you could spare would be much appreciated!

All the best,

Tom

Tom Michels

Executive Director,

**ONE Future Coalition**

[www.onefuture.us](http://www.onefuture.us)

Principal,

**BlueWater Strategies llc**

25 Massachusetts Avenue, NW

Suite 820

Washington, DC 20001

[tmichels@bwstrategies.com](mailto:tmichels@bwstrategies.com)

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